

OPERATION AND PARTS MANUAL



Mikasa

Vibration Roller Model MRH-800DS (Diesel)

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Revision #3 (02/02/05)



MULTIQUIP INC.

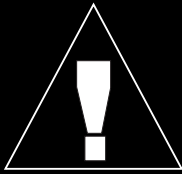
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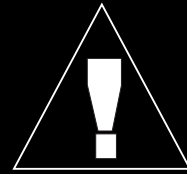
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PARTS DEPARTMENT:

800-427-1244
FAX: 800-672-7877
SERVICE DEPARTMENT/TECHNICAL ASSISTANCE:
800-478-1244
FAX: 310-631-5032



WARNING



CALIFORNIA — Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

HERE'S HOW TO GET HELP

*PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING*

PARTS DEPARTMENT

800-427-1244 or 310-537-3700

FAX: 800-672-7877 or 310-637-3284

SERVICE DEPARTMENT

800-421-1244

FAX: 310- 537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310- 631-5032

WARRANTY DEPARTMENT

888-661-4279, or 310-661-4279

FAX: 310- 537-1173

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MIKASA MRH-800DS-VIBRATION ROLLER

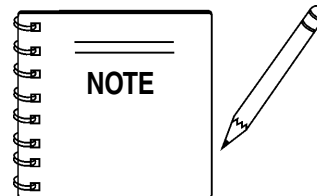
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Specification and part number are subject to change without notice.

PARTS ORDERING PROCEDURES

When ordering parts, please supply the following information:

- Dealer account number
- Dealer name and address
- Shipping address (if different than billing address)
- Return fax number
- Applicable model number
- Quantity, part number and description of each part
- Specify preferred method of shipment:
 - ✓ FedEx or UPS Ground
 - ✓ FedEx or UPS Second Day or Third Day
 - ✓ FedEx or UPS Next Day
 - ✓ Federal Express Priority One
 - ✓ DHL
 - ✓ Truck

Note: Unless otherwise indicated by customer, all orders are treated as "Standard Orders", and will ship within 24 hours. We will make every effort to ship "Air Shipments" the same day that the order is received, if prior to 2PM west coast time. "Stock Orders" must be so noted on fax or web forms.



Here's how to get help...

Please have the model and serial number on hand when calling.

Parts Department

800-427-1244 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Mayco Parts

800-306-2926 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Service Department

800-478-1244 Fax: 310-537-4259
310-537-3700

MQ Power Service Department

800-835-2551 Fax: 310-638-8046
310-537-3700

Warranty Department

800-421-1244, Ext. 279 Fax: 310-537-1173
310-537-3700, Ext. 279

Multiquip's Main Phone Numbers

800-421-1244 Fax: 310-537-3927
310-537-3700

Place Your Parts Order Via Web or Fax For Even More Savings!

Extra Discounts!

All parts orders which include complete part numbers and are received by our automated web parts order system, or by fax qualify for the following extra discounts:

Ordered via	Standard orders	Stock orders (\$750 list and above)
Fax	3%	10%
Web	5%	10%

Special freight allowances when you order 10 or more line items via Web or Fax! **

FedEx Ground Service **at no charge for freight**
No other allowances on freight shipped by any other carrier.

NOTE: DISCOUNTS ARE SUBJECT TO CHANGE



MULTIQUIP INC.
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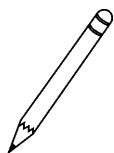
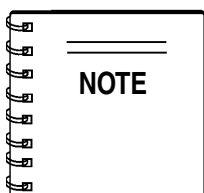
**Direct TOLL-FREE access
to our Parts Department:**

Toll-free nationwide — 800-427-1244

MRH-800DS — SAFETY MESSAGE ALERT SYMBOLS

FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Messages and Operating Instructions could result in injury to yourself and others.



This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of the Multiquip Model MRH-800DS Vibration Roller. Refer to the engine manufacturer's instructions for data relative to its safe operation.

Before using this vibration roller, ensure that the operating individual has read and understands all instructions in this manual.

SAFETY MESSAGE ALERT SYMBOLS

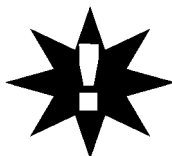
The three (3) Safety Messages shown below will inform you about potential hazards that could injure you or others. The Safety Messages specifically address the level of exposure to the operator, and are preceded by one of three words: **DANGER**, **WARNING**, or **CAUTION**.



DANGER: You **WILL** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



WARNING: You **CAN** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



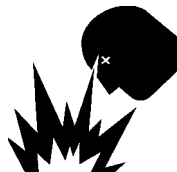
CAUTION: You **CAN** be injured if you do not follow directions.

Potential hazards associated with this vibration roller operation will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message Alert Symbols.

HAZARD SYMBOLS



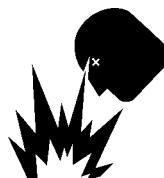
Lethal Exhaust Gases



Engine exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled. **NEVER** operate this equipment in a confined area or enclosed structure that does not provide ample free flow air.



Explosive Fuel



GASOLINE is extremely flammable, and its vapors can cause an explosion if ignited. **DO NOT** start the engine near spilled fuel or combustible fluids. **DO NOT** fill the fuel tank while the engine is running or hot. **DO NOT** overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system. Store fuel in approved containers, in well-ventilated areas and away from sparks and flames. **NEVER** use fuel as a cleaning agent.



Burn Hazards



Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operations. Never operate the engine with heat shields or heat guards removed.



Rotating Parts



NEVER operate equipment with covers, or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.

MRH-800DS — SAFETY MESSAGE ALERT SYMBOLS

Accidental Starting



OFF

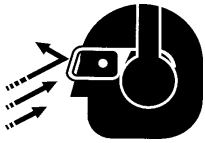
ALWAYS place the engine ON/OFF switch in the **OFF** position, when the vibration roller is not in use.

Respiratory Hazard



ALWAYS wear approved respiratory protection.

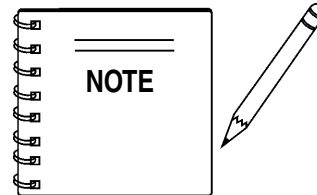
Sight and Hearing hazard



ALWAYS wear approved eye and hearing protection.

Equipment Damage Messages

Other important messages are provided throughout this manual to help prevent damage to your vibration roller, other property, or the surrounding environment.



This vibration roller, other property, or the surrounding environment could be damaged if you do not follow instructions.

MRH-800DS — RULES FOR SAFE OPERATION

CAUTION:



Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the MIKASA MRH-800DS Vibration Roller:

GENERAL SAFETY

- **DO NOT** operate or service this equipment before reading this entire manual.



- This equipment should not be operated by persons under 18 years of age.



- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job. **ALWAYS** wear slip resistant safety shoes or boots.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.



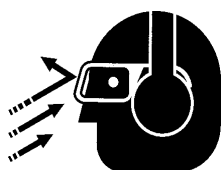
- **NEVER** operate this equipment under the influence of drugs or alcohol.

- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

- Manufacturer does not assume responsibility for any accident due to equipment modifications.

- Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.

- **ALWAYS** wear proper respiratory (mask), hearing and eye protection equipment when operating the vibration roller.

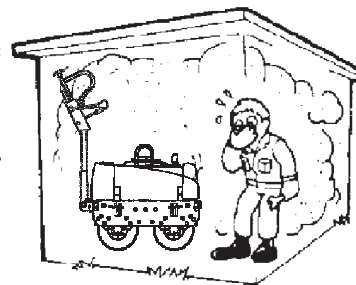


- **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing engine or vibration roller.



- **High Temperatures** – Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with *hot* components can cause serious burns.

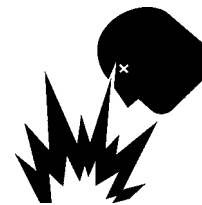
- The engine of this vibration roller requires an adequate free flow of cooling air. **NEVER** operate the vibration roller in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause serious damage to the vibration roller or engine and may cause injury to people and property. Remember the vibration roller's engine gives off **DEADLY** gases.



- **ALWAYS** refuel in a well-ventilated area, away from sparks and open flames.

- **ALWAYS** use extreme caution when working with **flammable** liquids. When refueling, **stop the engine** and allow it to cool. **DO NOT** smoke around or near the machine. Fire or explosion could result from fuel vapors, or if fuel is spilled on a hot engine.

- **NEVER** operate the vibration roller in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe *bodily harm or even death*.



- Topping-off to filler port is dangerous, as it tends to spill fuel.

- **ALWAYS** store the vibration roller in a clean, dry location out of the reach of children.

- **NEVER** run engine without air cleaner. Severe engine damage may occur.

- **NEVER** leave the vibration roller unattended, turn off engine.

- **CAUTION** must always be observed while servicing this vibration roller. Rotating parts can cause injury if contacted.

- **DO NOT** leave vibration roller with engine running. Use chock blocks if parking vibration roller on a grade.

MRH-800DS — RULES FOR SAFE OPERATION

- **ALWAYS** use extreme care when operating near obstructions, on slippery surfaces, grades and side slopes.
- When reversing, particularly on the edges and banks of ditches, as well as in front of obstacles, the operator must stay in a standing position at a safe distance from the machine.
- When operating near any house/building or pipelines, always check the effect of machine vibration. Stop the work if necessary.
- Unauthorized equipment modifications will void all warranties.
- Refer to the *Engine Owner's Manual* for engine technical questions or information.
- **DO NOT** operate the vibration roller with the front or rear cover open.
- Replace any worn or damaged vibration roller components immediately.
- **ALWAYS** turn the engine **OFF** before performing maintenance.
- **ALWAYS** make sure vibration roller is correctly secured to the trailer. Check all supports attaching the vibration roller to the trailer and make sure they are tight.
- **ALWAYS** keep the machine away from workers and obstacles. Also keep the immediate area free of bystanders.
- **ALWAYS** check the machine for loosened threads or bolts before starting.
- **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- **ALWAYS** be sure the operator is familiar with proper safety precautions and operations techniques before using vibration roller.
- A copy of this manual shall accompany the vibration roller at all times.
- **DO NOT** use worn out hoses or couplings; inspect daily.

■ **High Temperatures** – Always stop engine and allow the engine to cool before adding fuel, oil or performing service and maintenance functions. Contact with *hot* components can cause serious burns.

■ **NEVER** disconnect any "**emergency or safety devices**". These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death! Disconnection of any of these devices will void all warranties.

Emergencies

■ **ALWAYS** know the location of the nearest **fire extinguisher** and **first aid kit**. Know the location of the nearest telephone. Also know the phone numbers of the nearest **ambulance**, **doctor** and **fire department**. This information will be invaluable in case of an emergency.

Maintenance Safety

- **NEVER** lubricate components or attempt service on a running machine.
- **ALWAYS** allow the machine a proper amount of time to cool before servicing.
- Keep the machinery in proper running condition.
- Fix damage to the machine immediately and always replace broken parts.
- Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.
- **DO NOT** use food or plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil or fuel directly onto the ground, down a drain or into any water source.

Lifting

- The vibration roller has an operating weight of approximately 1562 lbs. (709 kg). Use lifting equipment capable of lifting this weight.
- Make sure the engine is off before lifting the machine.
- Use reliable cable in lifting the machine.
- Lift upright with sufficient bearing capacity to prevent machine from tilting or slipping.
- When lifting, keep the machine away from workers and animals.

MRH-800DS — OPERATION AND SAFETY DECALS

Figure 1 displays the operation and safety decals as they appear on the vibration roller. Should any of these decals become damaged or unreadable, contact the Multiquip Parts Department for a replacement set.

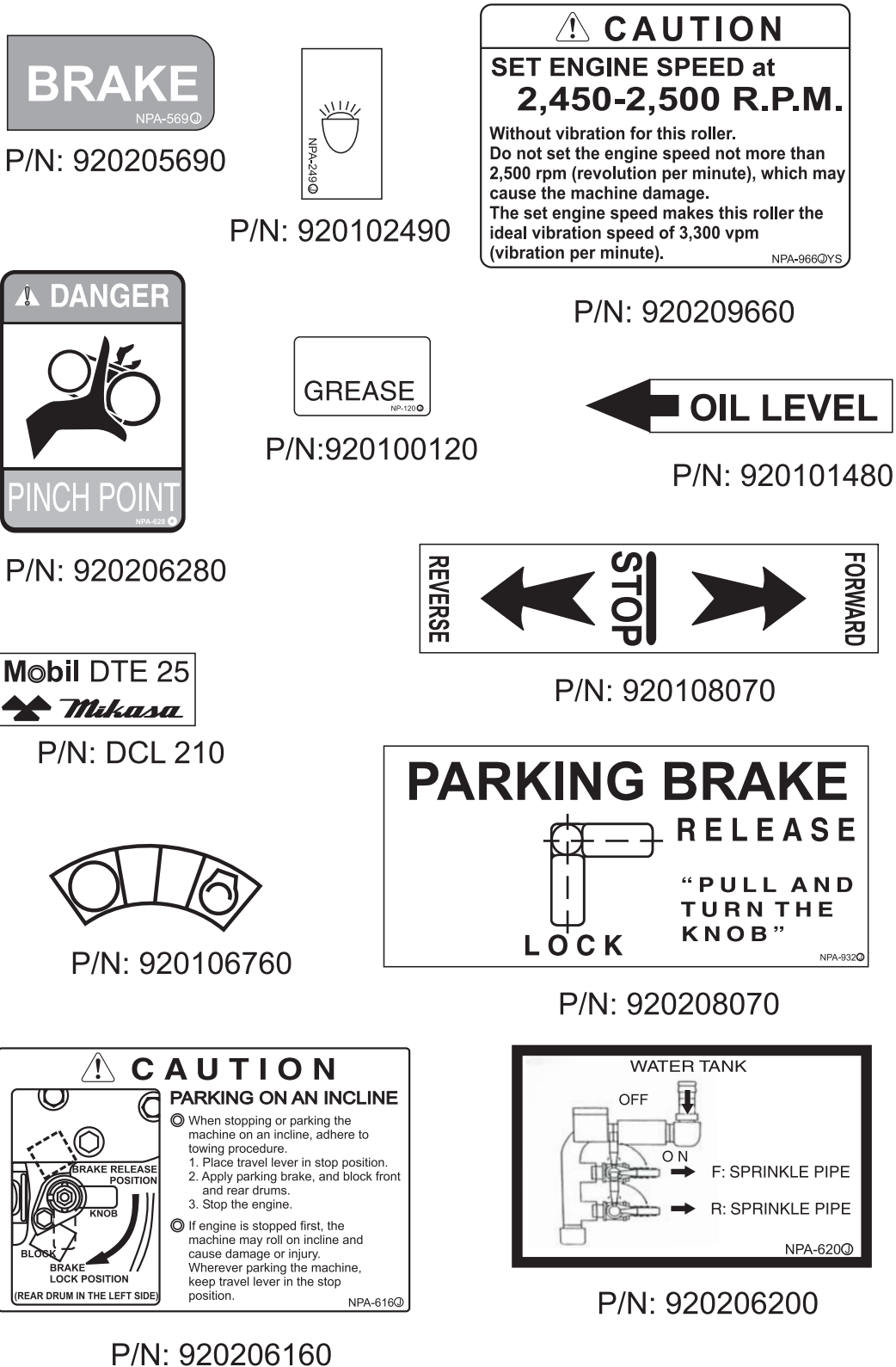


Figure 1. Operation and Safety Decals

MRH-800DS — OPERATION AND SAFETY DECALS



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P/N: 920201910



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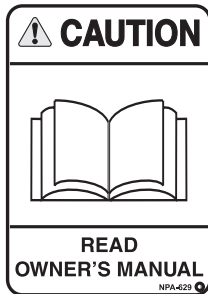


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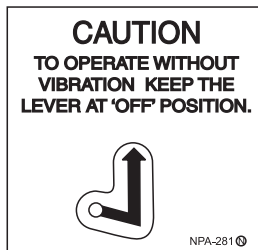


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IN COLD SEASON FOR HOUSING, DRAIN FROM WATER TANK AND HOSES TO PREVENT FREEZING

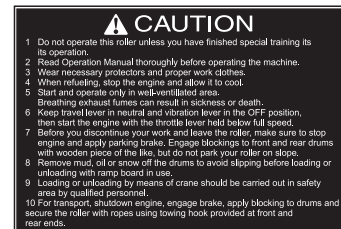


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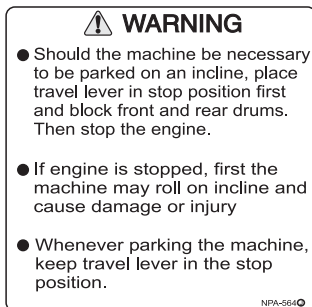


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P/N: 920200470



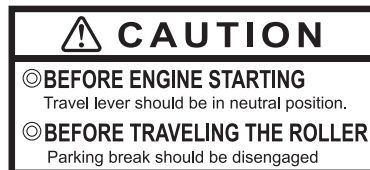
P/N: NPA-564



P/N: 920201450

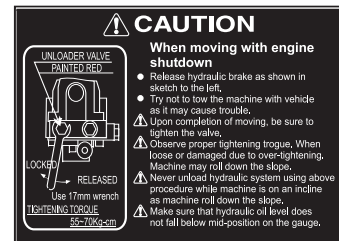


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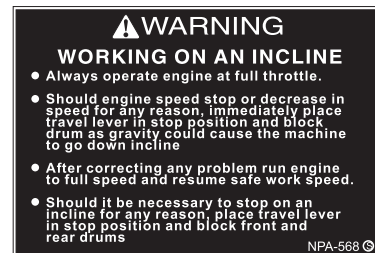


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P/N: 920202870



P/N: 920202860



P/N: 920205680

Figure 1. Operation and Safety Decals (Continued)

MRH-800DS — ROLLER SPECIFICATIONS

TABLE 1. MRH-800GS VIBRATION ROLLER SPECIFICATIONS

Dimensions	105 x 27.2 x 41.7 in (2670 x 692 x 1060 mm)
Drum Diameter	16 in. (406 mm)
Drum Width	25.6 in. (650 mm)
Curb Clearance	9.6 in. (243 mm)
Side Overhang	.83 in.(21 mm)
Operating Weight (with water)	1562 lbs. (710 kg)
Vibration Frequency	3,300 vpm
Centrifugal Force	23.5/2,400 kn/kgf
Drive System	Hydraulic Motor
Vibration System	Frame
Vibration Method	Belt Drive
Vibrator Shaft	Twin
Gradeability	20 degrees
Working Speed	0 - 3 mph (0 - 4.8 kph)
Fuel Tank Capacity	1.88 gallons (7.1 liters)
Lubricating Oil	6.6 gallons (25 liters)
Water Tank Capacity	10.57 gallons (40 liters)
Engine Model	YANMAR Model L100EE-DEVMK1
Starting System	Electric/Recoil Start

MRH-800DS — ENGINE SPECIFICATIONS

Table 2. ENGINE SPECIFICATIONS (YANMAR)

Engine Model	YANMAR L100EE-DEV MK1
Engine Type	Air-cooled Diesel
Cylinder Bore X Stroke	3.46 x 2.75 in (88 x 70 mm)
Displacement	13.7 fl oz (406 cc)
Maximum Output	10 HP
Fuel Tank Capacity	5.8 quarts (5.5 liters)
Oil Capacity	1.74 quarts (1.65 liters)
Dry Net Weight	116.6 lbs. (53 kg)
Dimensions (L x W x H)	16.4 x 18.5 x 19.4 in (417 x 470 x 494 mm)

MRH-800DS—VIBRATION ROLLER DIMENSIONS

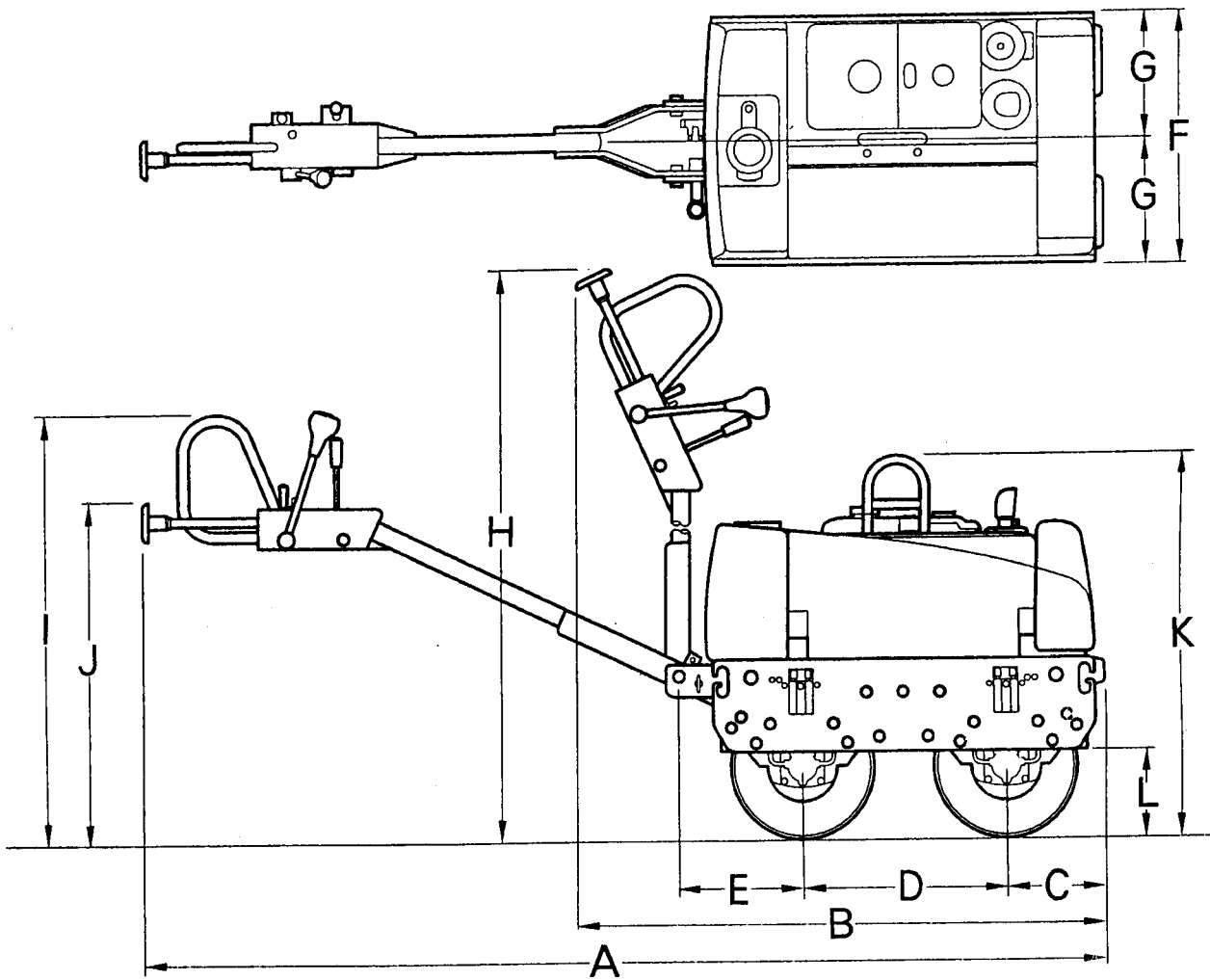


TABLE 3. DIMENSIONS			
LENGTH	A	105 in.	2670 mm.
	B	57 in.	1445 mm.
	C	10 in.	255 mm.
	D	22.8 in.	580 mm.
	E	13.8 in.	350 mm.
WIDTH	F	27.2 in.	692 mm.
	G	13.6 in.	346 mm.
HEIGHT	H	78.3 in.	1990 mm.
	I	46.5 in.	1180 mm.
	J	37.4 in.	950 mm.
	K	41.7 in.	1060 mm.
	L	9.6 in.	245 mm.

Figure 2. MRH-800DS Vibration Roller Dimensions

The Mikasa Model MRH-800DS is a powerful compacting tool capable of applying a tremendous force in consecutive impacts to a soil surface. Its applications include soil compacting for backfilling for gas pipelines, water pipelines and cable installation work.

The impact force of the MRH-800DS levels and uniformly compacts voids between soil particles to increase dry density.

Features include:

- Hydraulic transmission to allow speed change without gear shifting.
- Deadman device which when pressed or hit will cause the travel lever to return to neutral position bringing the machine to a stop.
- A horn to warn of machine's approach.
- Non-corrosive water tank for the sprinkler system with a capacity of more than 10 gallons.
- Lifting hook to transport machine.
- Front bumper and working light.
- Narrow profile with less than one inch wall clearance. Narrower width allows access to tighter areas. No exposed hydraulic hoses.
- Oil bath lubricated bearings and external vibration for less servicing and more dependability.
- Front and rear drum scrapers.
- Drum sprinkler system controls located near the operator.
- Easy access to hydraulic components and hydraulic filter.

MRH-800DS—VIBRATION ROLLER COMPONENTS

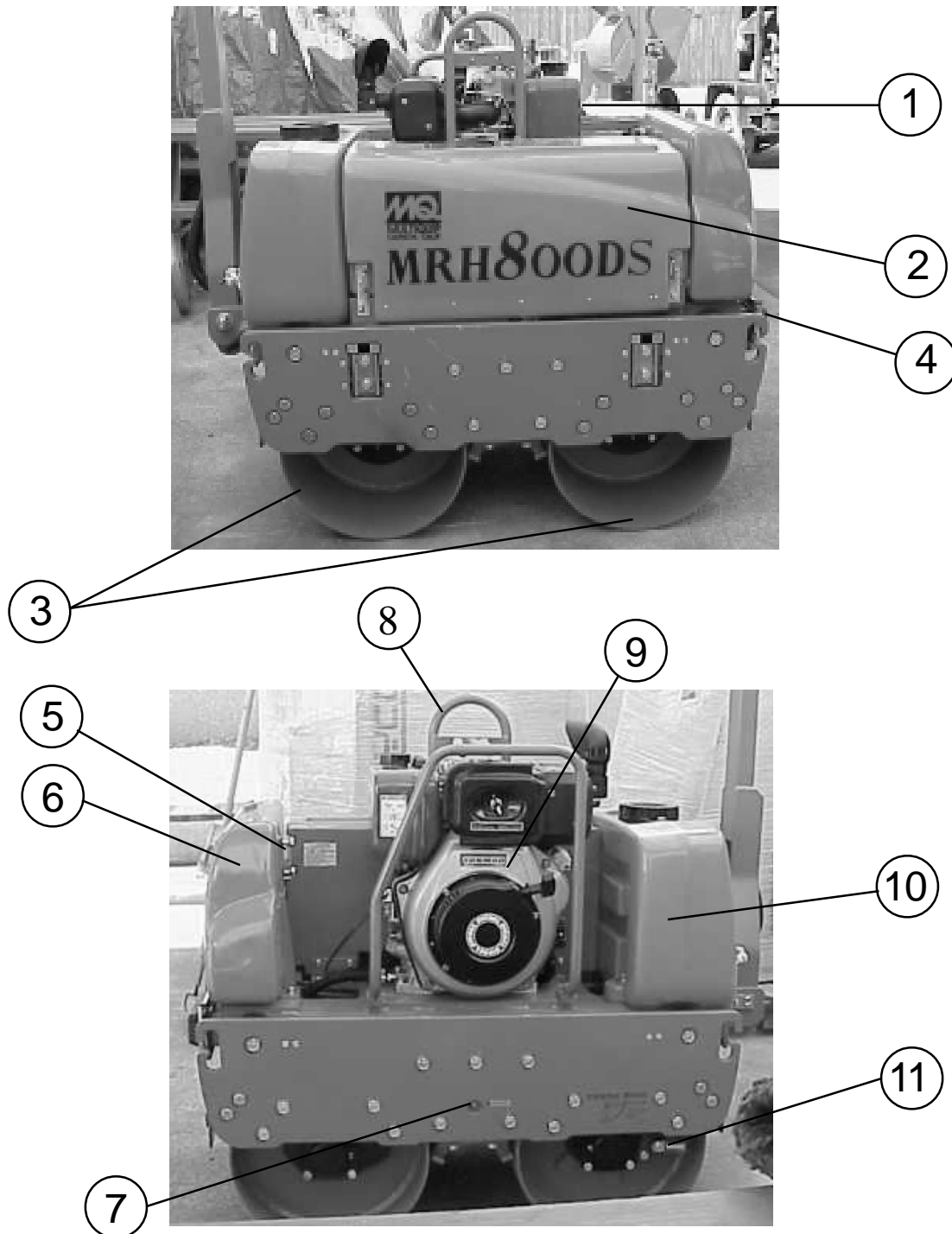


Figure 3. MRH-800DS Vibration Roller Components

MRH-800DS— VIBRATION ROLLER COMPONENTS

Figure 3 illustrates the location of the major components for the MRH-800DS Vibration Roller. The function of each component is described below:

1. **Fuel Tank/Cap** – Fill with diesel fuel. Fuel tank holds approximately 2 gallons (7.5 liters). **DO NOT** top off fuel. Wipe up any spilled fuel immediately.
2. **Center Cover** – When opened and supported by strut, provides access to oil pump and filter, battery, V-belt, and clutch box.
3. **Vibration Rollers** – 25-inch wide steel drums that provide compaction force in the compaction and patching of asphalt type surfaces.
4. **Front Headlights** – Activate using switch on control handle. Use to illuminate ground during nighttime or low light operating conditions.
5. **Hydraulic Oil Gauge** – Indicates the hydraulic oil level.
6. **Oil Tank** – Fill with proper grade of hydraulic oil.
7. **Vibrator Oil Level Plug** – Remove to check vibrator oil level.
8. **Lifting Hook** – Used to lift the machine with crane or other lifting device.
9. **Engine** – This machine uses the Yanmar L100A engine. Refer to the engine Owner's Manual for more information.
10. **Water Tank** – Holds 10.57 gallons (40 liters) for the sprinkler system.
11. **Parking Brake** – Makes sure machine will not accidentally move when parked or not in use.

MRH-800DS— HANDLE BAR/LEVER COMPONENTS

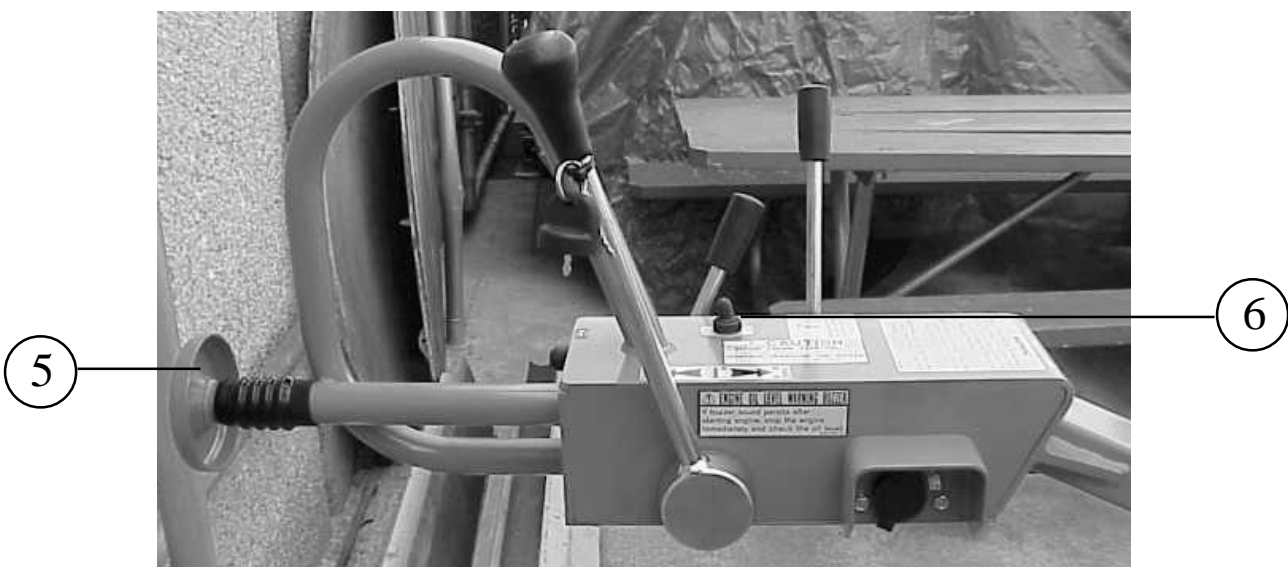


Figure 4. MRH-800DS Lever Components

HANDLE BAR/LEVER COMPONENTS

Figure 4 illustrates the location of the major lever components on the handle bar of the machine. Each component is described below:

1. **Travel Lever** – Controls the direction of travel of the machine (forward and reverse).
2. **Horn Button** – When pressed, gives a warning sound of the machine approaching.
3. **Vibration Lever** – Turns vibration on and off.
4. **Throttle Lever** – Controls the start up of the machine.
5. **Dead-Man Device** – When pressed or hit while traveling in reverse, causes the travel lever to return to neutral position to stop the machine.
6. **Light ON/OFF Switch** - Turns headlight on and off.
7. **Starter Switch** - Engine starts when key is turned to the **RUN** position

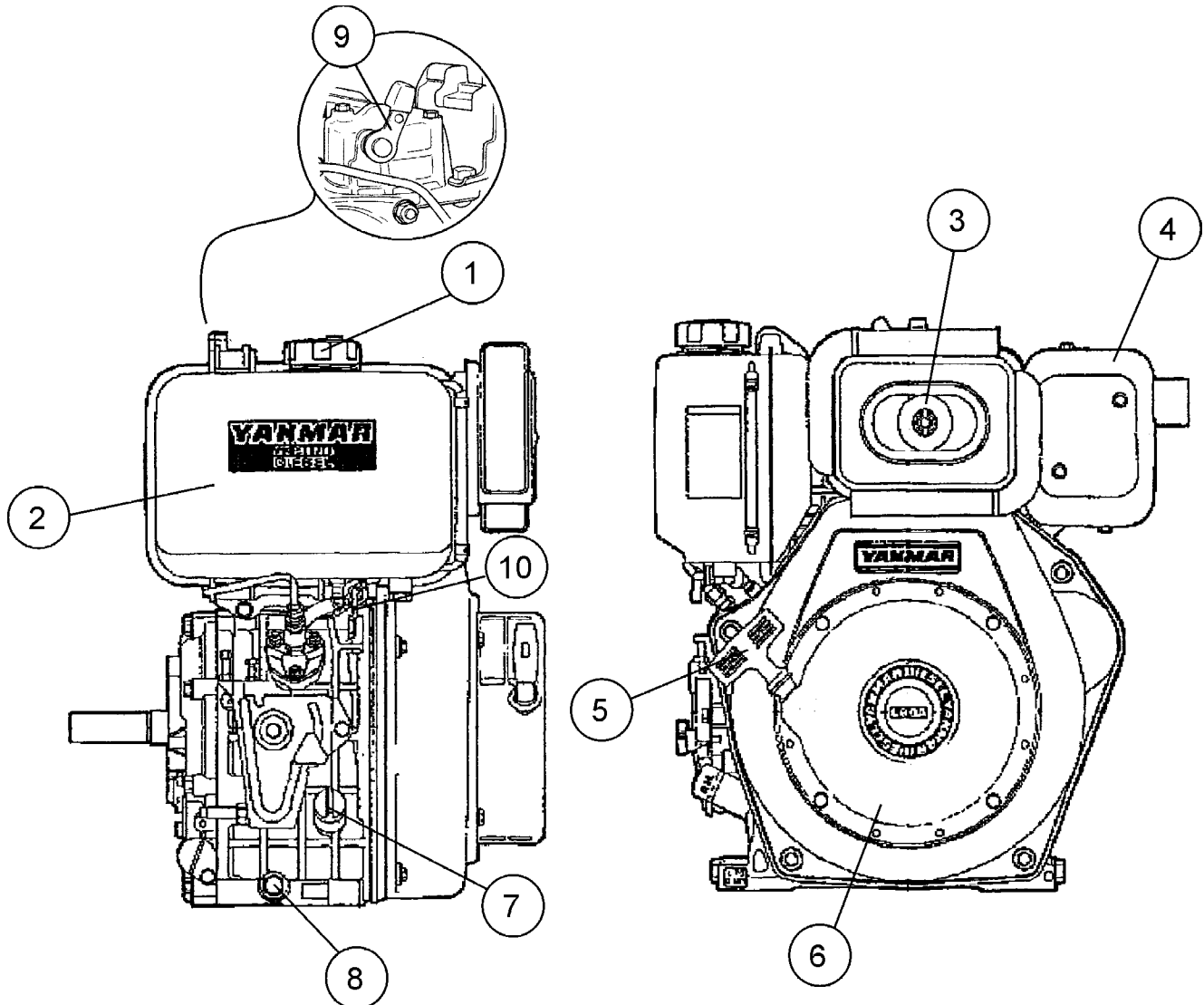


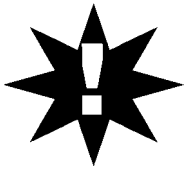
Figure 5. MVH-402DSB Engine Components

ENGINE COMPONENTS

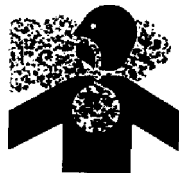
Figure 5 illustrates the location of the major engine components of the machine. Each component is described below:

1. **Fuel Filler Cap** – Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tighten securely. **DO NOT** over fill.
2. **Fuel Tank** – Diesel engine holds 5.8 quarts of diesel fuel.
3. **Air Cleaner** – Prevents dirt and other debris from entering the fuel system. Remove wing-nut on top of air filter canister to gain access to filter element.
4. **Muffler** – Used to reduce noise and emissions.
5. **Recoil Starter (pull rope)** – Type of engine starting method. Alternate type would be electric start (ignition key).
6. **Recoil Starter** – Housing for pull rope and starter.
7. **Oil Filler Cap/Dipstick** – Remove this cap to add oil to the oil tank. Use dipstick to check oil level.
8. **Oil Drain Plug** – Unscrew plug to drain oil from engine crankcase. Dispose of oil in a safe manner.
9. **Decompression Lever** – Press down before starting engine. To prevent damage to the engine, **DO NOT** use for any other purpose.
10. **Fuel Cock** – Controls the flow of diesel fuel to the engine. Must be in the **ON** position when starting and running the engine.

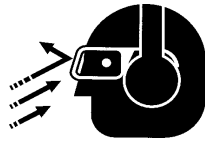
DANGER



NEVER operate the compactor in a confined area or enclosed area structure that does not provide ample *free flow of air*.



ALWAYS wear approved eye and hearing protection before operating the compactor.



Before Starting

1. Read safety instructions at the beginning of manual.
2. Remove dirt and dust, particularly in the engine cooling air inlet, carburetor and air cleaner.
3. Check the air filter for dirt and dust. If air filter is dirty, replace air filter with a new one as required.
4. Check carburetor for external dirt and dust. Clean with dry compressed air.
5. Check fastening nuts and bolts for tightness.
6. Understand the geographical features and regulations of the job site.



Engine Oil Check

1. To check the engine oil level, place the compactor on secure level ground with the engine stopped.
2. Remove the filler dipstick from the engine oil filler hole (Figure 6) and wipe clean.

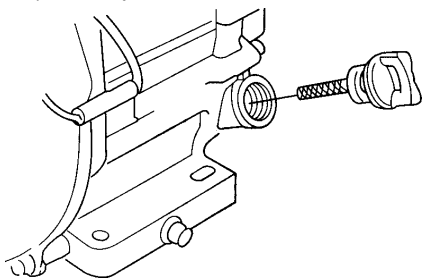


Figure 6. Engine Oil Level

TABLE 4. OIL TYPE

Season	Temperature	Oil Type
Summer	25°C or Higher	SAE 10W-30
Spring/Fall	25°C~10°C	SAE 10W-30/20
Winter	0°C or Lower	SAE 10W-10

3. Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
4. If the oil level is low, fill to the edge of the oil filler hole with the recommended oil type (Table 3). Maximum oil capacity is 1.16 quarts (1.1 liters).

Checking The Hydraulic System

1. Check the oil tank level gauge (Figure 7). Oil level should be at the middle indication of the gauge or higher. Fill as required
2. Check the surroundings of the oil tank, hydraulic pump and motor for oil leakage.

Level should be middle of gauge or higher

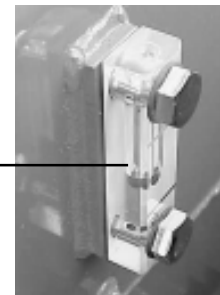


Figure 7. Hydraulic System Oil Level Gauge

DANGER



ALWAYS keep hands and fingers away from pinch points. **DO NOT** allow anyone to reach in on dangerous sections of the machine to avoid any accidents.

Checking The V-Belt

1. Remove the 2 bolts, one on each side of the center cover, with a #13 socket wrench. Open the center cover of the machine and support it with the strut by inserting its end to the hole in the base (Figure 8).
2. Check V-belt for proper tension. Insufficient tension causes weak vibration.

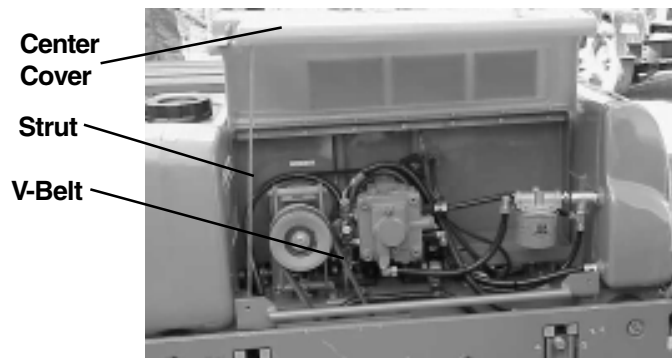


Figure 8. Checking V-Belt Tension

Checking The Vibrator Oil Level

1. Check vibrator casing for any oil leakage.
2. If any leakage is noticed, remove the level plug on the side of the plate (Figure 9).
3. Check the oil level.

Vibrator Oil Level Plug

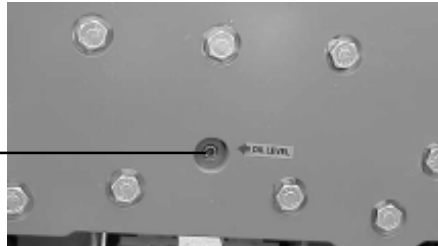


Figure 9. Checking Vibrator Oil Level

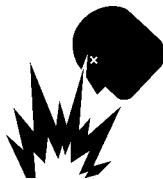
Fuel Check

1. Remove the fuel cap located on top of the engine fuel tank.
2. Visually inspect to see if the fuel level is low. If fuel is low, replenish with unleaded gasoline using a strainer for filtration. **DO NOT** top-off fuel. Wipe up any spilled fuel *immediately!*

DANGER



Motor fuels are highly flammable and can be dangerous if mishandled. **DO NOT** smoke while refueling. **DO NOT** attempt to refuel the pump if the engine is *hot!* or *running*.



Checking Water Tank

1. Check the water tank to see if filled. Add water if necessary. The water tank has a capacity of approximately 10 gallons (40 liters) (Figure 10).

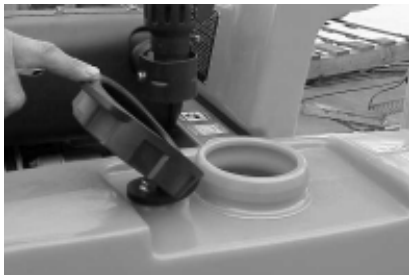
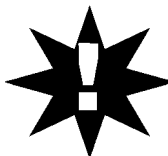


Figure 10. Checking Water Tank

CAUTION :



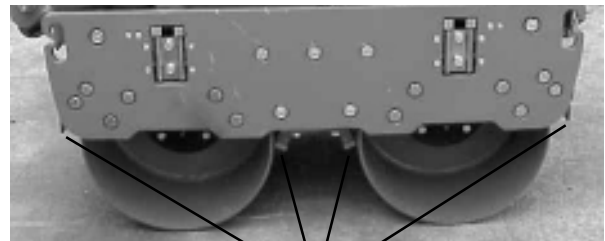
Be careful not to confuse the water tank with the oil tank.

Checking Levers and Horn

1. Check travel, vibration, and throttle levers to make sure they are functioning properly (Figure 4).
2. With travel lever placed in reverse, push the deadman device and verify that the travel lever returns to neutral position. The travel lever stays in neutral position once the deadman device is released.
3. Press the horn and verify that it functions properly.

Checking Scrapers

1. Check scrapers and make sure that they are not clogged with mud, bent or damaged (Figure 11).
2. Adjust clearance between drums and scrapers as necessary.



Scrapers

Figure 11. Checking Scrapers

Checking Bolts, Nuts and Screws

1. Check bolts, nuts, and screws on various parts of the machine, including the engine, for proper tightness.

Positioning the Handle Bar

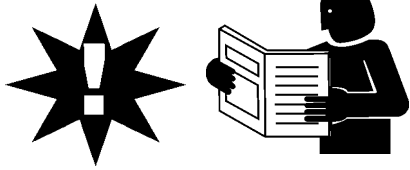
1. Release the handle bar release pin (Figure 12) and position the handle bar to the lowered position before starting operation.
2. When machine is not in use, release the handle bar release pin and position the handle bar to the upright position.



Handle Bar Release Pin

Figure 12. Positioning the Handle Bar

CAUTION :



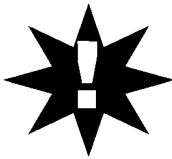
DO NOT attempt to operate the roller until the Safety, General Information and Inspection sections of this manual have been *read and thoroughly understood*.

This section is intended to assist the operator with the *initial start-up* of the roller. It is extremely important that this section be read carefully before attempting to use the compactor in the field.

STARTING THE ENGINE

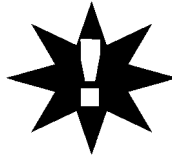
The engine can be started by motor (electric) or manually (recoil). Refer to Figures 3 and 4 for the location of controls and components.

CAUTION :



Make sure to follow all safety rules referenced in the safety section of this manual before operating roller. Keep work area clear of debris and other objects that could cause damage to the roller or bodily injury.

CAUTION :



When the engine is running, **NEVER** turn the starter key to the **START** position

Electric Start

1. On the control handle:
 - A. Move the *throttle lever* to the **RUN** position.
 - B. Move the *travel lever* to the **NEUTRAL** position.
 - C. Move the *vibration lever* to the **OFF** position.
4. Open the fuel cock by turning it clockwise to the down position (Figure 13).



Fuel Cock
(Open
Position)

Figure 13. Open Fuel Cock

5. Insert the starter key into the key switch and turn it to the **RUN** position (Figure 14). The buzzer should sound at this time.

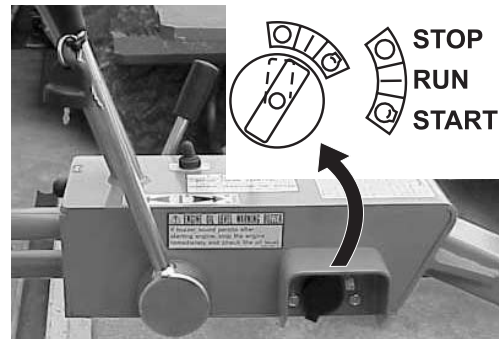


Figure 14. Starter Key (Run Position)

6. Turn the starter key further to the right to the **START** position to start the engine. Buzzer stops sounding when the engine speed increases. With safety switch equipped, motor runs only when the travel lever is in the neutral position.

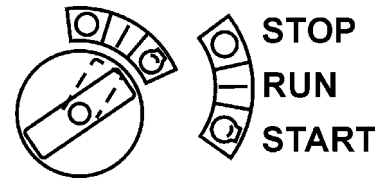
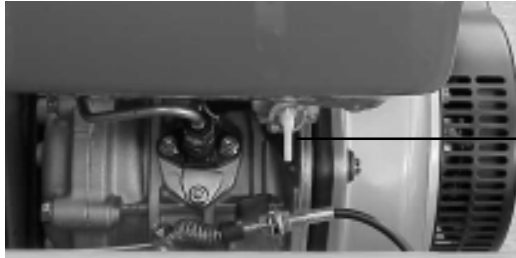


Figure 15. Starter Key (Start Position)

7. If the engine fails to start, **DO NOT** continue to rotate the starter key for more than 5 seconds. Return the key to the **RUN** position and wait 20 to 30 seconds before starting again.
8. After starting the engine, continue to warm up the engine for about 3 to 10 seconds especially in cold weather.
9. If the buzzer does not stop sounding after the engine has started, shutdown engine immediately and check engine oil level. The buzzer functions as engine oil level warning also.

Recoil Start

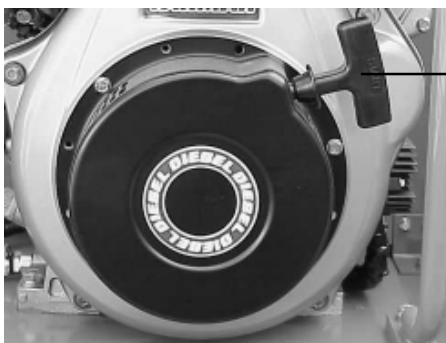
1. Move the throttle lever to the **RUN** position.
2. Open the fuel cock by turning it clockwise to the down position (Figure 16).



Fuel Cock
(Open
Position)

Figure 16. Open Fuel Cock

3. Pull the starting handle slowly until you feel some resistance (Figure 17). Return handle to original position.



Pull
Handle To
Start

Figure 17. Engine Start Handle

4. Push down the decompression lever (Figure 18).

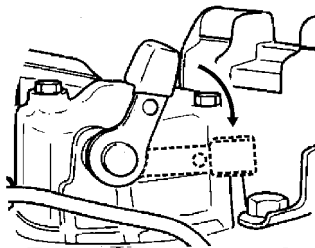


Figure 18. Decompression Lever

5. Pull the starting handle hard and fast to start engine (Figure 19).

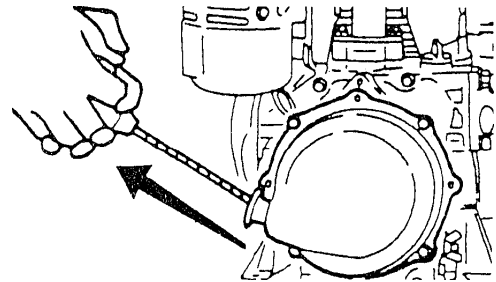
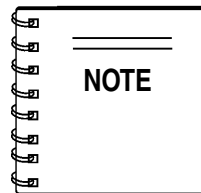


Figure 19. Engine Start Handle

6. If the engine does not start, repeat steps 3 through 5.



When starting with a motor starter, a decompressor is not normally required. However, when ambient temperature or battery charger level is low, use of a decompressor will help make the start-up easier.

TRAVELING

1. Before starting to travel, make sure to release parking brake located on the left side of the rear roller. If the parking brake lever is tight, moving the roller back and forth will make it easier (Figure 20).

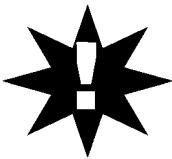


Parking Brake (Released Position)

Figure 20. Parking Brake

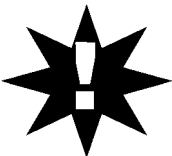
2. With the throttle lever in the **RUN** position, increase the engine rotation.
3. Push the travel lever forward slightly. This will cause the roller to travel forward at slow speed.
4. To increase the travel speed, push the travel lever further.
5. Travel speed can be varied between 0 and 3 km/h (both forward and reverse).
6. Push the travel lever backward to go in the reverse direction.

CAUTION :



DO NOT reduce speed during work. When shifting travel lever from forward to reverse, be sure to stop the lever at the neutral position first before moving the lever to the opposite direction. **DO NOT** shift the lever from forward to reverse (or reverse to forward) in one motion.

CAUTION :



After test travel, shut down engine and check for any problems including oil leakage. If any trouble is found, correct the problem before attempting to operate the roller again.

VIBRATING

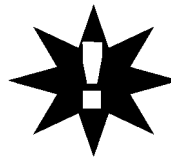
1. Shift the vibration lever **AWAY** from its **OFF** position. The vibration lever will automatically spring forward and the roller will start vibrating (Figure 21).



Off Position of Vibration Lever

Figure 21. Vibration Lever

CAUTION :



Using vibration with clutch slipping causes the clutch to burn. Also, vibration should **NOT** be used over completely compacted area, paved road surface, or with stationary roller.

WATERING

1. For watering work, turn the water cocks clockwise, at the rear of the machine, to start sprinkling. (Figure 22).

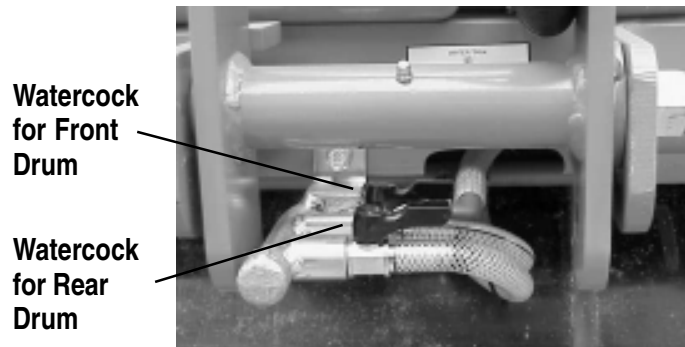


Figure 22. Water Cocks

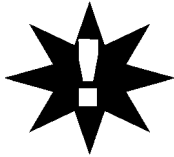
SAFETY FEATURES

1. A horn is provided to warn of approach.
2. The dead man device prevents accidental traveling in reverse. It automatically makes the travel lever return to neutral position by stopping the machine when an object comes in contact with the dead man device.

STOPPING

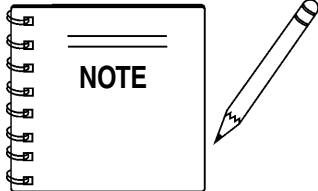
1. With travel lever in the **NEUTRAL** position, and the vibration lever in the **OFF** position, return the throttle lever to the **START** position. Allow the machine to cool down for 3 to 5 minutes.
2. Push the throttle lever forward to stop the engine. In a motor start, return the key switch to the **STOP** position as soon as the engine stops.

CAUTION :



Neglecting to return the key switch to the **STOP** position will cause the battery to discharge making start up impossible the next time.

3. After the engine stops, close the fuel cock.
4. Lock the parking brake by pulling the brake lever and rotating it 90 degrees clockwise.



Parking brake system should always be kept clean to avoid mud deposits.

UNLOADING

1. If you need to move the roller by pushing it manually once engine is stopped, loosen bolt of bypass valve on oil pump by one rotation counterclockwise. This will cause the hydraulic break to disengage and allow the roller to be moved more easily (Figure 23).
2. After moving, tighten the bolt again. Tightening torque is 55 to 70 kgf-cm.

Bypass
Valve
Bolt

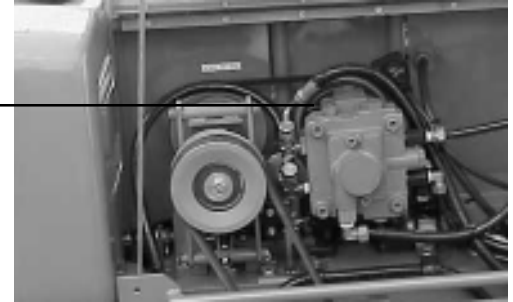
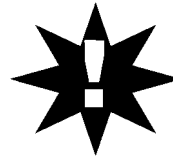


Figure 23. Location of Bypass Valve Bolt

CAUTION :



NEVER tow roller with any type of vehicle. Doing so will damage the hydraulic system.
NEVER perform unloading procedure on a slope. This may cause roller to roll down if parking brake or blocking is deficient.

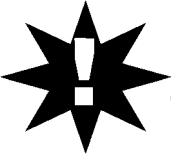
LIFTING

1. Use a crane or lift to load and unload the machine. A skilled crane operator is required to perform the job.
2. When lifting the machine, check for any damaged or loose bolts, lifting hooks, and shock mounts.
3. Check any damaged or loose bolts in the guard frame to avoid machine sliding off.
4. Make sure that the machine is shut off before machine is lifted.
5. Use reliable cable for lifting.
6. **ALWAYS** lift the machine vertically and keep the machine away from workers and animals.
7. **DO NOT** lift the machine higher than the required height.

TRANSPORTING

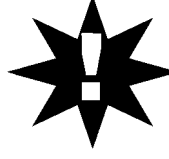
1. Always make sure that the machine is shut off while being transported.
2. Check that the fuel cap is properly closed and tightened.
3. When traveling long distances or on rugged terrain, drain the fuel of the machine before transporting.
4. Tie down the machine securely on the transportation so that it will not move or topple over.

CAUTION:



Inspection and other services should **ALWAYS** be carried out on hard and level ground with the engine shutdown.

CAUTION:



Fuel piping and connections should be replaced every 2 years.

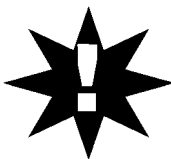
Inspection and Maintenance Service Tables.

- To make sure your plate compactor is always in good working condition before using, carry out the maintenance inspection in accordance with Tables 5 through 7.

TABLE 5. MRH-800DS MACHINE INSPECTION

ITEM	HOURS OF OPERATION	REMARKS
Loose or Missing Screws	Every 8 hours (every day)	
Damaged Parts	Every 8 hours (every day)	
Function of Controlling System Part	Every 8 hours (every day)	
Hydraulic System Leak	Every 100 hours	See page 27
Vibrator Oil Check	Every 100 hours	See page 27
Vibrator Oil Replacement	Every 300 hours	See page 26
Hydraulic Oil Check	Every 100 hours	See page 26
Hydraulic Oil Replacement	First after 200 hours, then every 1,000 hours	See page 27
V-belt (clutch) Check	Every 200 hours	See page 27
Battery Check	Every 100 hours	See page 28

CAUTION:



These inspection intervals are for operation under normal conditions. Adjust your inspection intervals based on the number of hours the roller is in use, and your particular working conditions.

TABLE 6. MRH-800DS ENGINE CHECK

ITEM	HOURS OF OPERATION
Oil or Fuel Leak	Every 8 hours (every day)
Tightness of Fastening Threads	Every 8 hours (every day)
Engine Oil Check and Replenishment	Every 8 hours (every day) (Replenish to specified maximum level)
Engine Oil Replacement	After first 25 hours then every 50 to 100 hours
Air Filter Cleaning	Every 100 hours
See separate engine manual for details on engine check.	

Daily Service

- Check for leakage of fuel or oil.
- Check for loose screws including tightness. See Table 7 below (tightening torque), for retightening:

TABLE 7. TIGHTENING TORQUE (in. kg/cm) DIAMETER

Material	6mm	8mm	10mm	12mm	14mm	16mm	18mm	20mm
4T	70	150	300	500	750	1,100	1,400	2,000
6-8T	100	250	500	800	1,300	2,000	2,700	3,800
11T	150	400	800	1,200	2,000	2,900	4,200	5,600
*	100	300~350	650~700					

* (In case counter-part is of aluminum)
(Threads in use with this machine are all right handed)
Material and quality of material is marked on each bolt, and screw.

- Remove soil and clean the bottom of compaction plate.
- Check hydraulic pump, piping and hose for any leakage. A loosened hydraulic hose can be a cause for leakage. Check hydraulic hose connections with wrench applied for tightness.
- Check engine oil.

Engine Oil Replacement:

1. Replace engine oil in the first 25 hours of operation and every 50 to 100 hours afterwards.
2. Oil may be drained more easily when it is warm after operation (For more details, see separate engine Owner's Manual).

Air Filter

1. The air filter element should be cleaned because a clogged air cleaner can cause poor engine starting, lack of power and shorten engine life substantially.

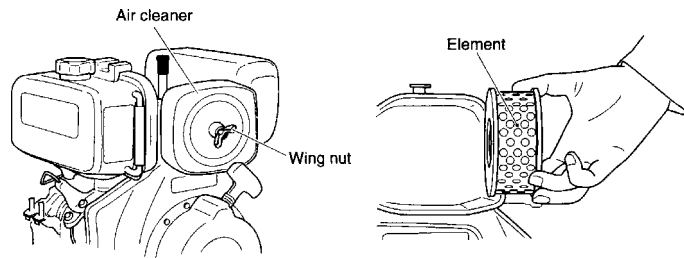


Figure 24. Engine Air Filter and Element

2. To clean or replace air filter loosen the wing nut on the air filter housing (Figure 24) remove the cover and take out air filter cartridge. If only cleaning of the air filter is desired blow through the air filter cartridge from the inside, moving a jet of dry compressed air up and down until all dust is removed.

VIBRATION CLUTCH ADJUSTMENT

1. Move vibration lever to the **OFF** position.
2. Loosen the front and rear nuts at the end of vibration clutch cable (Figure 25).
3. Turn in the nut on the front side again and at the position that release fork starts to move, turn in the nut by one or two threads. Lock it a this position together with the rear nut.

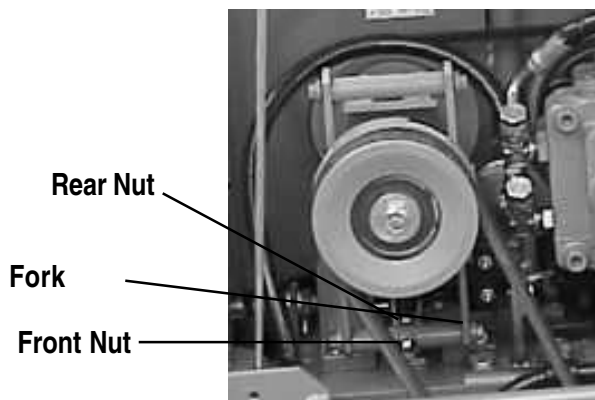
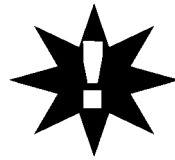


Figure 25. Vibration Clutch Adjustment

CAUTION:



NEVER attempt to check the V-belt with the engine running. Severe injury can occur if your hand gets caught between the V-belt and the clutch (Figure 26). Always use safety gloves.

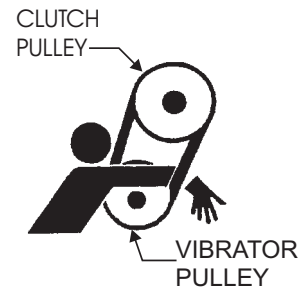
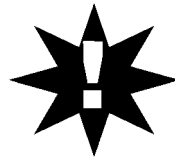


Figure 26. V-Belt Hazard

CAUTION :



Excessive turning of front nut may cause the sliding engagement of clutch to take place or no vibration takes place even when vibration lever is engaged.

On the other hand, insufficient turn may cause sliding engagement of clutch even when the vibration lever is placed in the **OFF** position or for vibration to remain engaged.

HYDRAULIC SYSTEM INSPECTION AND SERVICE

1. Check motor and pump for any damage.
2. Check hoses and pipes for proper tightness and make sure there are no leaks.
3. Check nylon tubes for hydraulic oil intake and drain. Retighten brass nut if loose and if a leak is detected. If leak continues after retightening, replace nylon tube, nut and sleeve.
4. Check oil tank for proper oil level using the hydraulic system oil level gauge (See Figure 7). Make sure hydraulic oil has not whitened or emulsified. Whitish color means aeration in pump. Retighten pipe and correct level of oil. Emulsification means water in the hydraulic oil. Replace the oil.

ROLLER INSPECTION AND ADJUSTMENT

1. Refer to Table 8 for oil and grease requirements.
2. Check oil tank level daily.
3. Check the machine for oil leak and proper function of lever, cables, and links daily.

MACHINE MAINTENANCE

1. At the end of each day's operation, wash down dust and dirt off the machine. Clean area around drums and scrapers making sure all mud is removed.
2. Drain water tank completely.
3. Cover the machine to prevent dust and store in dry place away from sun exposure.

LONG TERM STORAGE

1. Conduct thorough lubrication and oil change.
2. Disconnect battery terminals and disconnect battery from machine. Store battery.
3. If there is a possibility that ambient temperature will drop below freezing point, add antifreeze agent to coolant.
4. Cover the inlet and outlet of air cleaner and muffler securely.
5. Store machine indoors. Do not leave outdoors.

Refer to Table 7 for lubrication necessary for the machine.

BATTERY MAINTENANCE

DANGER :



Lead-acid battery contains sulfuric acid, which may damage eyes or skin on contact.



FOR YOUR SAFETY:

- **ALWAYS** wear a face shield to avoid acid getting into the eyes. If acid gets in contact with eyes, flush immediately with clean water and get medical advice.
- Wear rubber gloves and protective clothes to keep acid off skin. If acid gets in contact with skin, wash off immediately with clean water.
- Use a flashlight to check battery electrolyte level. **ALWAYS** check the engine is stopped.
- **DO NOT** charge battery or jump-start engine when the battery is frozen. Warm the battery to 15 degrees F or battery may explode.
- Replace the battery with the same or similar capacity battery or battery may explode.

- **DO NOT** close the exhaust outlet of battery. The gas pressure building up in the battery may cause explosion.
 - Before using a battery charger, read and understand the charger instruction manual thoroughly.
 - Charge the battery in a non-spark, well-ventilated area. Avoid fire from cigarette sparks or matches.
1. If a battery has not been used for some time, reduce the charge level initially to protect each plate inside the battery.
 2. Check the battery terminals periodically to ensure that they are in good condition.
 3. Use wire brush or sand paper to clean the battery terminals.
 4. Check battery for cracks or any other damage. If white pattern appears inside the battery or paste has accumulated at the bottom, replace the battery.
 5. Measure the specific gravity of electrolyte:
 - completely charged: 1.270 - 1.290
 - needs charging: 1.260 or lower
 6. If the machine will not be in operation for a long period of time, charge the battery sufficiently, tighten all caps, correctly, store in cool dry place and check the battery charge level every month to maintain the performance of the battery.

BATTERY CABLE CONNECTION

1. When removing cable, disconnect the ground side (normally negative) first (Figure 27).



Positive Terminal

Figure 27. Battery Connection

2. When installing cable connect the ground side (normally negative) last.

FORWARD AND REVERSE TRAVEL ADJUSTMENT

1. If neutral position for forward and reverse travel has been displaced, conduct the neutral adjustment.
2. If roller travels forward with the ball of ball plunger remaining in V slot of the guide, loosen M8 bolt and slide the slide plate slightly toward the engine. If the roller travels backward, slide the plate towards side plate (Figure 28).

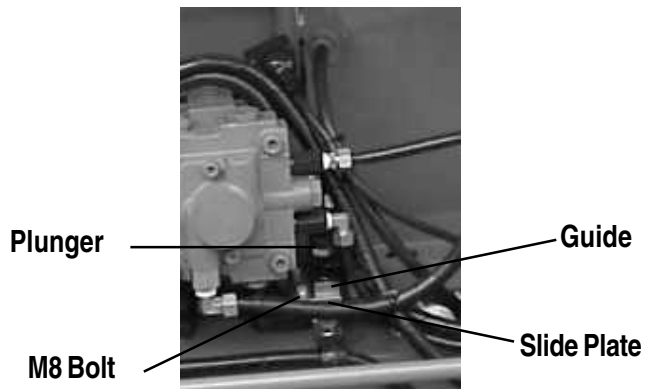
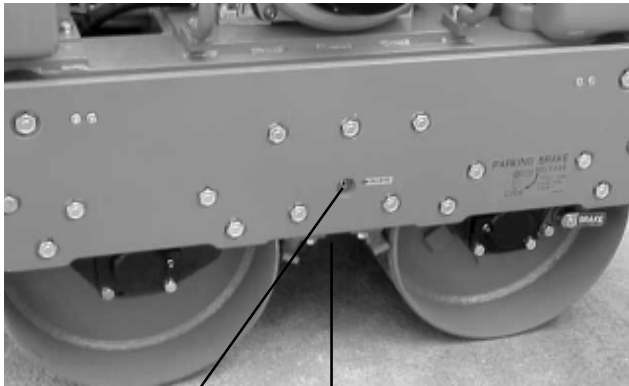


Figure 28. Adjustment of Neutral Position

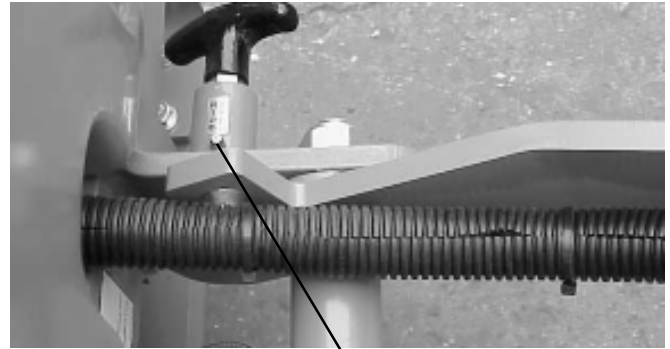
3. With M8 bolt tightened, start engine and check the neutral for forward and reverse. If still displaced, repeat the procedure.
4. If neutral position of forward/reverse lever has been displaced, use the turn buckle located on the oil pump side of forward/reverse cable.

TABLE 8. MRH-800DS LUBRICATION CHART

ITEM	MAINTENANCE NEEDED	FREQUENCY	TYPE	LOCATION
Vibrator Oil	Replace Oil	Every 300 Hours of Operation	SAE10W30 (1.5 liters)	see Figure 29
Engine Oil	Replace Oil	Initially - After 10 to 20 Hours of Operation Thereafter - Every 50 to 100 Hours of Operation	SAE#30 or SAE10W30 (Spring - Summer)	see Figure 6
			SAE#20 or SAE10W30 (Fall - Winter)	
			SAE10W30 (Extremely Cold Region)	
Hydraulic Oil	Replace Oil	Every 1000 to 1500 Hours of Operation	Viscosity: ISO VG32 equivalent - for cold region ISO VG46 or 56 equivalent - for warm region Shipped from factory with Shell Tellus 46 (25 liters)	see Figure 7
Travel Lever, Vibration Lever, Throttle Lever	Add Lubrication Oil to Sliding Parts	Every 50 Hours of Operation	Lubrication Oil	see Figure 4
Dead Man's Device	Lubricate Grease Fitting	Every 50 Hours of Operation	Grease	see Figure 4
Handle Bar Release Pin	Lubricate Grease Fitting	Every 50 Hours of Operation	Grease	see Figure 32
Bearing Cover	Lubricate Grease Fitting	Every 50 Hours of Operation	Grease	see Figures 30,31
Clutch Box	Lubricate Grease Fitting	Every 50 Hours of Operation	Grease	see Figure 25
Travel Lever	Lubricate Sliding Parts	Every 50 Hours of Operation	Grease	see Figure 4
Oil Filter	Replace Oil Filter	Initially - After 25 Hours of Operation Thereafter - Every 500 Hours of Operation	Mikasa Genuine 10 micron Filter Paper	see Figure 26



Vibrator Oil Level Plug
Vibrator Oil Drain Plug
Figure 29. Vibrator Oil Maintenance



Handle Bar Release Pin Grease Fitting
Figure 32. Handle Bar Maintenance

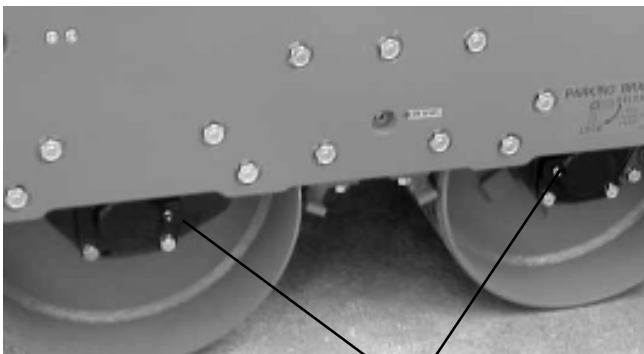


Figure 30. Bearing Cover Grease Fitting



Clutch Box Grease Fitting
Figure 33. Clutch Box Maintenance



Bearing Cover Grease Fitting
Figure 31. Bearing Cover Maintenance



Hydraulic Oil Filter
Figure 34. Hydraulic Oil Filter Location

MRH-800DS—ROLLER TROUBLESHOOTING

TABLE 9. TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Unit does not travel.	Parking brake still engaged?	Release parking brake lever.
Unit does not travel or travel is not smooth.	Defective centrifugal clutch?	Repair or replace clutch.
	Damaged rubber coupling and flange?	Replace rubber coupling and flange.
	Defective travel cable and link?	Repair or replace travel cable and link.
	Damaged scraper or too much mud in scraper?	Replace or repair scraper.
	Damaged or clogged oil filter?	Replace filter.
	Damaged or leaking hydraulic pipe?	Repair or replace parts.
	Low oil level or contaminated oil?	Replenish or replace oil.
	Damaged or leaking hydraulic pump?	Repair or replace hydraulic pump.
	Damaged or leaking hydraulic motor?	Repair or replace hydraulic motor.
	Damaged drum gear and bearing?	Repair parts.
	Bad drum rotation?	Repair or replace drum.
Unit does not vibrate or has weak vibration.	Defective centrifugal clutch?	Repair or replace clutch.
	Damaged or slipping V-belt?	Replace V-belt or adjust tension.
	Damaged vibration cable and linkage?	Replace or repair vibration cable and linkage.
	Damaged vibration clutch?	Adjust or replace clutch.
	Defective clutch vibrator pulley V-belt?	Replace V-belt.
	Vibrator does not turn smoothly with hand?	Check and repair vibrator. Check if oil level is not excessively high.

MRH-800DS—ENGINE TROUBLESHOOTING

TABLE 10. ENGINE TROUBLESHOOTING

SYMPTON	POSSIBLE PROBLEM	SOLUTION
Engine will not start or start is delayed, although engine can be turned over.	Speed control lever is in "STOP" position?	Set speed control lever to "START" position.
	No fuel reaching injection pump?	Add fuel. Check entire fuel system.
	Defective fuel pump?	Replace fuel pump.
	Fuel filter clogged?	Replace fuel filter and clean tank.
	Faulty fuel supply line?	Replace or repair fuel line.
	Compression too low?	Check piston, cylinder and valves. Adjust or repair per engine repair manual.
	Fuel injector not working correctly?	Repair or replace injector in accordance with engine repair manual.
	Oil pressure too low?	Check engine oil pressure.
	Low starting temperature limit exceeded	Comply with cold starting instructions and proper oil viscosity.
At low temperatures engine will not start.	Fuel separates has inadequate resistance to low temperatures?	Check whether clear (not turbid) fuel emerges from the fuel line (detach from injection pump). If the fuel is turbid or separated, warm up the engine or drain the complete fuel supply system. Refuel with winter grade diesel fuel.
	Engine oil too thick?	Refill engine crankcase with correct type of oil for winter environment.
Engine fires but stops soon as starter is switched off.	Throttle lever in STOP position?	Reposition throttle lever to RUN position.
	Fuel filter blocked?	Replace fuel filter.
	Fuel supply blocked?	Check the entire fuel system.
Engine stops by itself during normal operation.	Fuel tank empty?	Add fuel.
	Fuel filter blocked?	Replace fuel filter.

MRH-800DS— ENGINE TROUBLESHOOTING

TABLE 10. ENGINE TROUBLESHOOTING (CONTINUED)

SYMPTON	POSSIBLE PROBLEM	SOLUTION
Low engine power, output and speed.	Fuel tank empty?	Replace fuel filter.
	Fuel filter clogged?	Replace fuel filter.
	Fuel tank venting is inadequate?	Ensure that tank is adequately vented.
	Speed control lever does not remain in selected position?	See engine manual for corrective action.
	Engine oil level too full?	Correct engine oil level?
Low engine power output and low speed, black exhaust smoke.	Air filter blocked?	Clean or replace air filter.
	Incorrect valve clearances?	Adjust valves per engine specification.
	Malfunction at injector?	See engine manual.

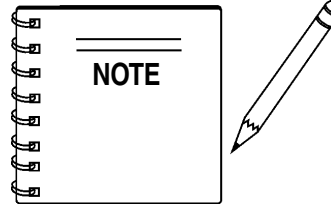
EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

Section 1: Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.



If more than one of the same reference number is listed, the last one listed indicates newest (or latest) part available.

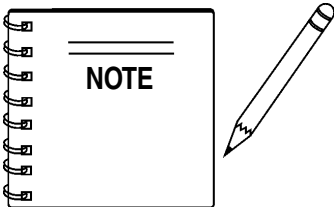
Section 2: Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

Section 3: Items Found In the “Items Number” Column

All parts with same symbol in the number column, *, #, +, %, or ■, belong to the same assembly or kit.



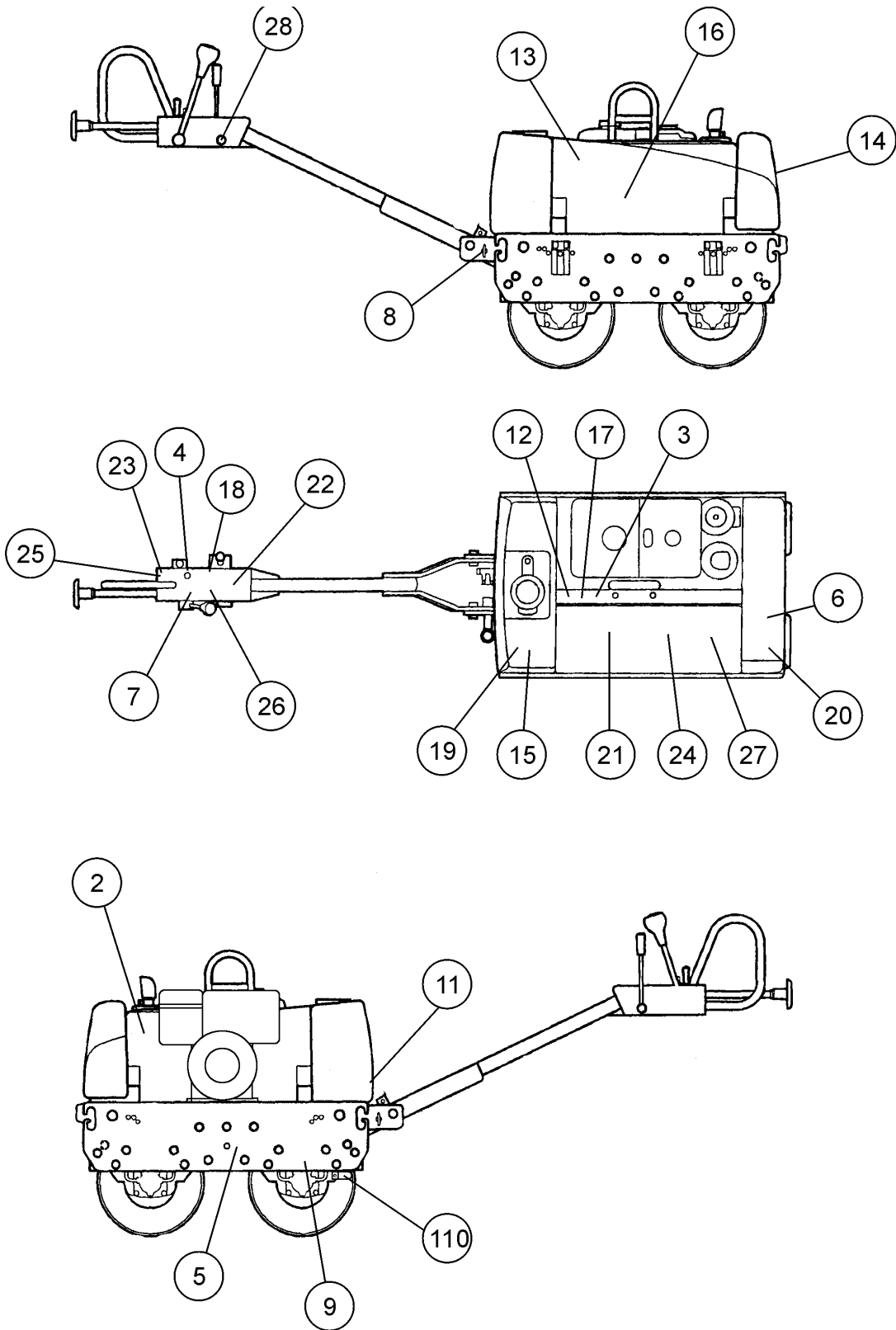
The contents of this parts catalog are subject to change without notice.

**MRH-800DS VIBRATION ROLLER 1 TO 3
UNITS WITH YANMAR L100EE-DEVMK2
DIESEL ENGINE**

Qty.	P/N	Description
1	954401890	FILTER, WATER TANK
2	954001380	FILTER, HYDRAULIC OIL
2	070503000	V-BELT, ENGINE
1	956100022	THROTTLE WIRE
1	954300340	CAP, WATER TANK
2	070100381	V-BELT, VIBRATOR ASSY.
1	71487553101 ..	VALVE ASSY., FUEL INJECTOR
1	71465651110 ..	PUMP ASSY., FUEL INJECTOR
3	11465012590 ..	ELEMENT, AIR CLEANER
1	11428855041 ..	CAP ASSY., FUEL TANK
2	11425035110 ..	STRAINER, LUB. OIL ASSY.
1	11425055100 ..	FILTER, FUEL STRAINER
2	11425055121 ..	FILTER, FUEL OIL
2	955000010	KEY, STARTING

MRH-800DS VIBRATION ROLLER — DECAL PLACEMENT

DECAL PLACEMENT



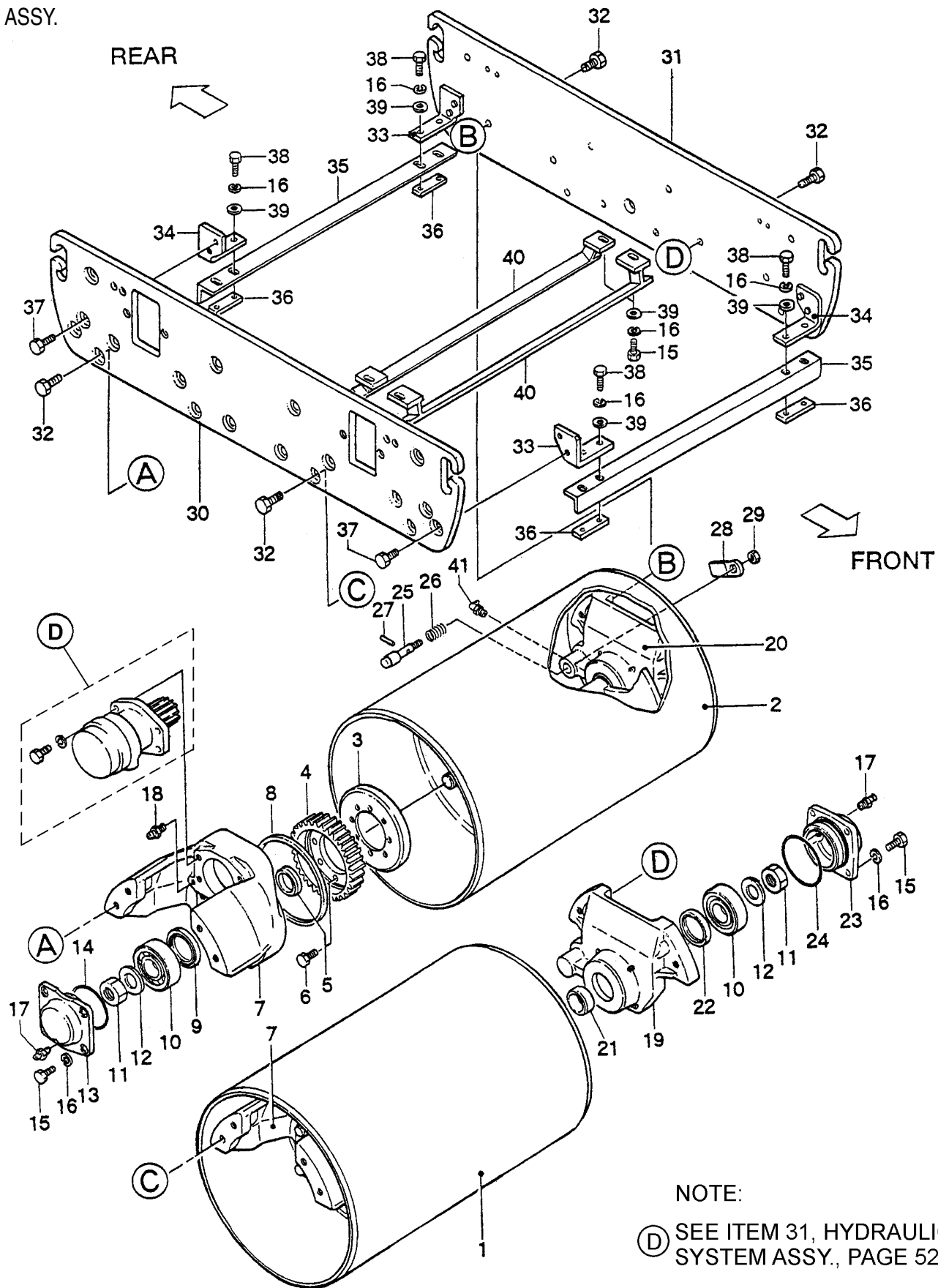
MRH-800DS VIBRATION ROLLER — DECAL PLACEMENT

PLACEMENT

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	920205690	DECAL, BRAKE LEVER	1	NPA-569
2	9202009660	DECAL, CAUTION - ENGINE SPEED	1	NPA-966
3	920206280	DECAL, DANGER - PINCH POINT	1	NPA-628
4	920102490	DECAL, LIGHT SWITCH	1	NPA-249
5	920101480	DECAL, CHECK OIL LEVEL	1	NP-148
6	DCL210	DECAL, MIKASA MOBILE DTE 25	1	
7	920108070	DECAL, FORWARD/REVERSE LEVER	1	NPA-507
8	920100120	DECAL, GREASE POINT	1	NPA-120
9	920208070	DECAL, PARKING BREAK	1	NPA-907
10	920206160	DECAL, CAUTION - INCLINE PARKING	1	NPA-616
11	920206200	DECAL, WATER TANK SPRINKLE PIPE	1	NPA-620
12	920203330	DECAL, HEARING PROTECTION	1	NPA-333
13	920201910	DECAL, MULTIQUIP - CARSON	1	NPA-191
14	920101510	DECAL, MIKASA	1	NP-151
15	920200320	DECAL, WATER TANK	1	NP-32
16	920207620	DECAL, MRH-800DS	1	NPA-762
17	920206290	DECAL, CAUTION - OWNERS MANUAL	1	NPA-629
18	920202810	DECAL, CAUTION - VIBRATION LEVER	1	NPA-281
19	920104280	DECAL, FREEZING PREVENTION	1	NPA-428
20	920200470	DECAL, OIL TANK	1	NPA-47
21	920202870	DECAL, CAUTION - INSTRUCTIONS PLATE ..	1	NPA-287
22	920205640	DECAL, WARNING - INCLINE PARKING	1	NPA-564
23	920105170	DECAL, THROTTLE	1	NPA-517
24	920202860	DECAL, CAUTION - MOVING PLATE	1	NPA-286
25	920201450	DECAL, HORN	1	NPA-145
26	920202920	DECAL, CAUTION - STARTING ENGINE	1	NPA-292
27	920205680	DECAL, WARNING - INCLINE PLATE	1	NPA-292
28	920106760	DECAL, IGNITION	1	NPA-676

MRH-800DS VIBRATION ROLLER — AXLE ASSY.

AXLE ASSY.



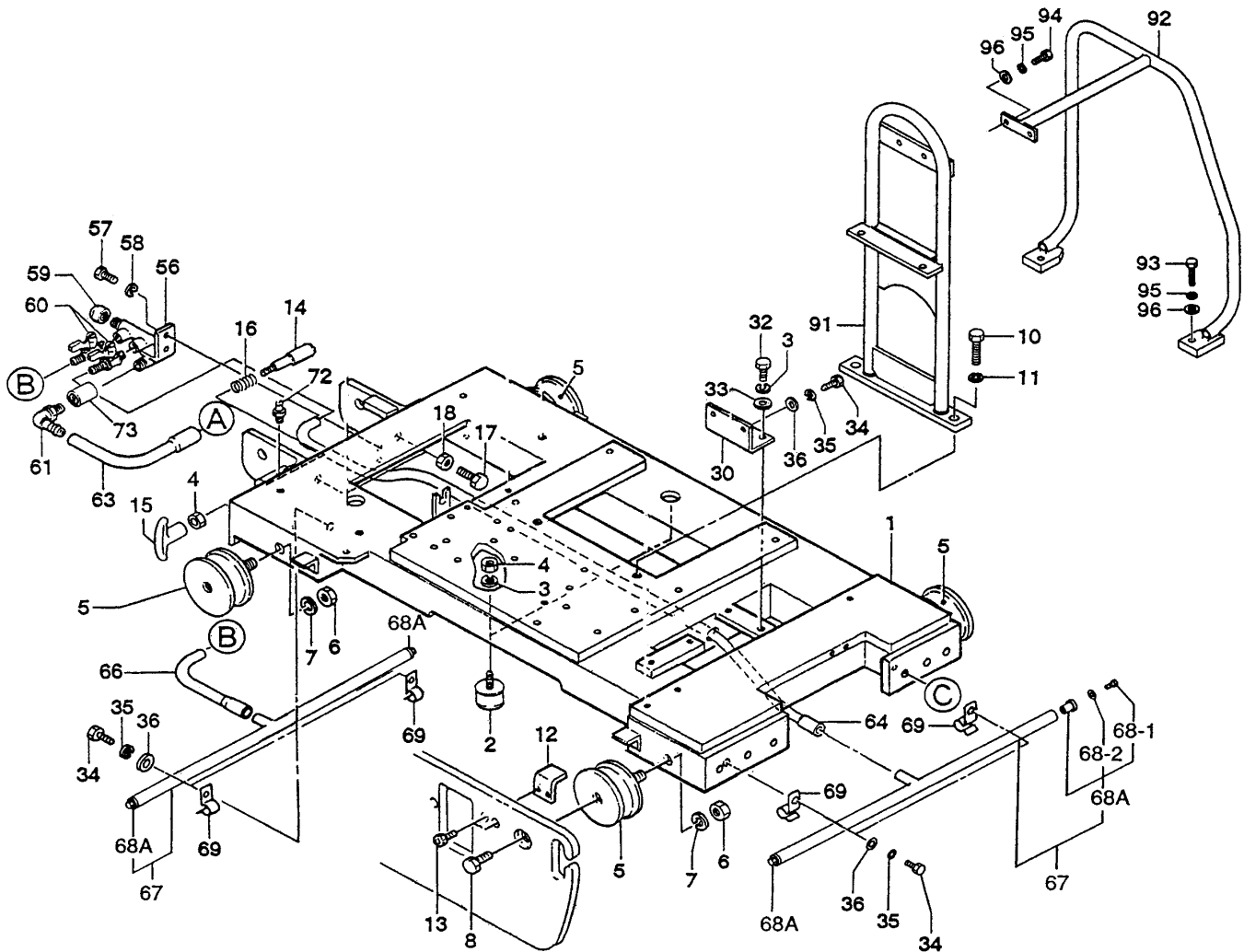
MRH-800DS VIBRATION ROLLER — AXLE ASSY.

AXLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	515112960	DRUM	1	
2	515112970	DRUM	1	
3	515333990	GEAR PLATE	2	
4	515334000	GEAR (39)	2	
5	509429660	COLLAR 405510	2	
6	001121630	BOLT 16X30 T	16	
7	515117050	DRUM BRACKET (R)	2	
8	506425980	FELT (DRUM) 5X5X1200	1	
9	060605020	OIL SEAL VC-55727	2	
10	042006308	BEARING 6308DU	4	
11	020130240	NUT M30, P2.0	4	
12	031130450	WASHER M30	4	
13	515334010	BEARING COVER (R)	2	
14	050100850	O-RING G-85	2	
15	001221025	BOLT 10X25 T	20	
16	030210250	WASHER M10	28	
17	505015060	GREASE FITTING A-PT1/8	4	
18	351010050	GREASE FITTING A-MT6X1	2	
19	515113000	DRUM BRACKET (L)	1	
20	515113010	DRUM BRACKET (LB)	1	
21	506425670	COLLAR 405520	2	
22	060705010	OIL SEAL TB4-55729	2	
23	515334040	BEARING COVER (L)	2	
24	050300950	O-RING S-95	2	
25	515446960	LOCK PUN, BRAKE	1	
26	515446950	SPRING, BRAKE	1	
27	025405025	SPRING PIN 5X25	1	
28	515446970	KNOB, BRAKE	1	
29	020410060	NUT M10, H=6	1	
30	515117040	SIDE PLATE (R)	1	
31	515114350	SIDE PLATE (L)	1	
32	001221430	BOLT 14X30 T	16	
33	515341930	BRACKET (A), SCRAPER	2	
34	515341940	VRACKET (B), SCRAPER	2	
35	515334020	SCRAPER (OUT)	2	
36	515447510	MOUNT NUT, SCRAPER	4	
37	001121435	BOLT 14X35 T	8	
38	001221030	BOLT 10X30 T	8	
39	031110160	WASHER M10	12	
40	515334030	SCRAPER (IN)	2	
41	959010330	GREASE FITTING B-M6FX1	1	

MRH-800DS VIBRATION ROLLER — BASE ASSY.

BASE ASSY.



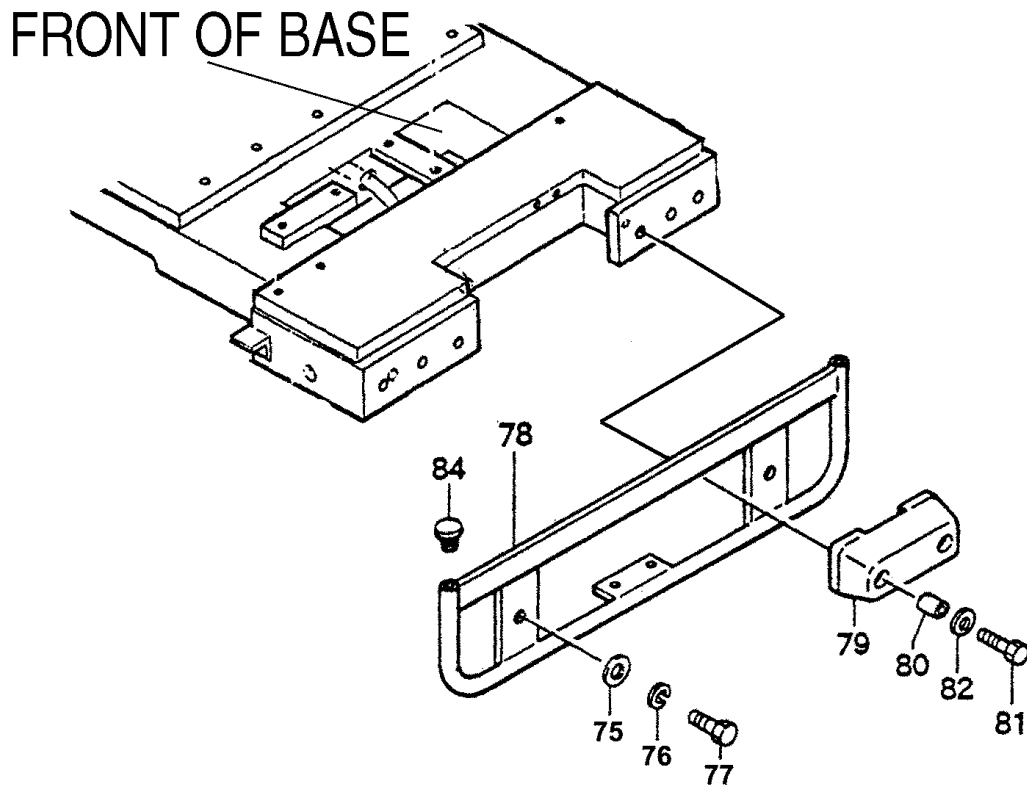
MRH-800DS VIBRATION ROLLER — BASE ASSY.

BASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	515114460	BASE (YANMAR-L100)	1	
2	939010010	SHOCK ABSORBER, STOPPER 45	2	
3	030210250	WASHER, LOCK M10	9	
4	020310080	NUT M10	3	
5	930710031	SHOCK ABSORBER RV1-100	4	
6	020316130	NUT M16	4	
7	030216400	WASHER, LOCK M16	4	
8	001221625	BOLT 16X25 T	4	
10	001221440	BOLT 14X40 T	2	
11	030214350	WASHER, LOCK M14	2	
12	515447010	SAFETY GUARD	4	
13	001520815	SOCKET HEAD BOLT 8X13 T	8	
14	501402870	HANDLE STOPPER	1	
15	959010413	EYE NUT M10	1	
15	959010416	T- KNOB (M10)	1	
16	501402880	SPRING / HANDLE (1. 4X18X44)	1	
17	001221230	BOLT 12X30 T	2	
18	0039312000	NUT M12	2	REPLACES 020312100
30	5153344100	STAY, COVER (F)	1	
32	012210020	BOLT 10X20 T	5	REPLACES 001221020
33	031110160	WASHER, FLAT M10	7	
34	0105050616	BOLT 6X15 T	8	REPLACES 001220615
35	030206150	WASHER, LOCK M6	8	
36	952404470	WASHER, FLAT M6	8	REPLACES 031106100
56	515334050	SUPPORT , WATER COCK	1	
57	014208020	BOLT 8X20 T	2	REPLACES 001220820
58	030208200	SWM8	2	
59	509010010	CAP 3/8	1	
60	954403240	COCK PT1/4, BH-1211 (PL)	2	
61	954405660	ELBOW 3/8X12	1	
63	515446980	WATER HOSE (T-V) 300L	1	
64	515446990	WATER HOSE (F) 1200L	1	
66	515447470	WATER HOSE (R) 260L	1	
67	515910030	SPRINKLING PIPE AY MRH	2	INCLUDES ITEMS W/*
68	506425750	CAP, SPRINKLING PIPE	4	
68A*	515910050	CAP AY, W/BOLT, WASHER	4	INCLUDES ITEMS W/+
68-1+	001220620	BOLT 6X20 T	4	
68-2+	031106100	WASHER, FLAT M6	4	
69	515449900	CLAMP 00	4	
72	171010120	GREASE FITTING A-M6F	1	
73	954001590	SOCKET PT3/8-3/8	1	
91	515213600	HOOK (L100)	1	
92	515113710	GUARD (L100)	1	
93	001221035	BOLT 10X35T	2	
94	001221020	BOLT 10X20t	2	
95	030210250	WASHER, LOCK M10	4	
96	091004016	WASHER, FLAT M10	4	

MRH-800DS VIBRATION ROLLER — FRONT GUARD ASSY.

FRONT GUARD ASSY.



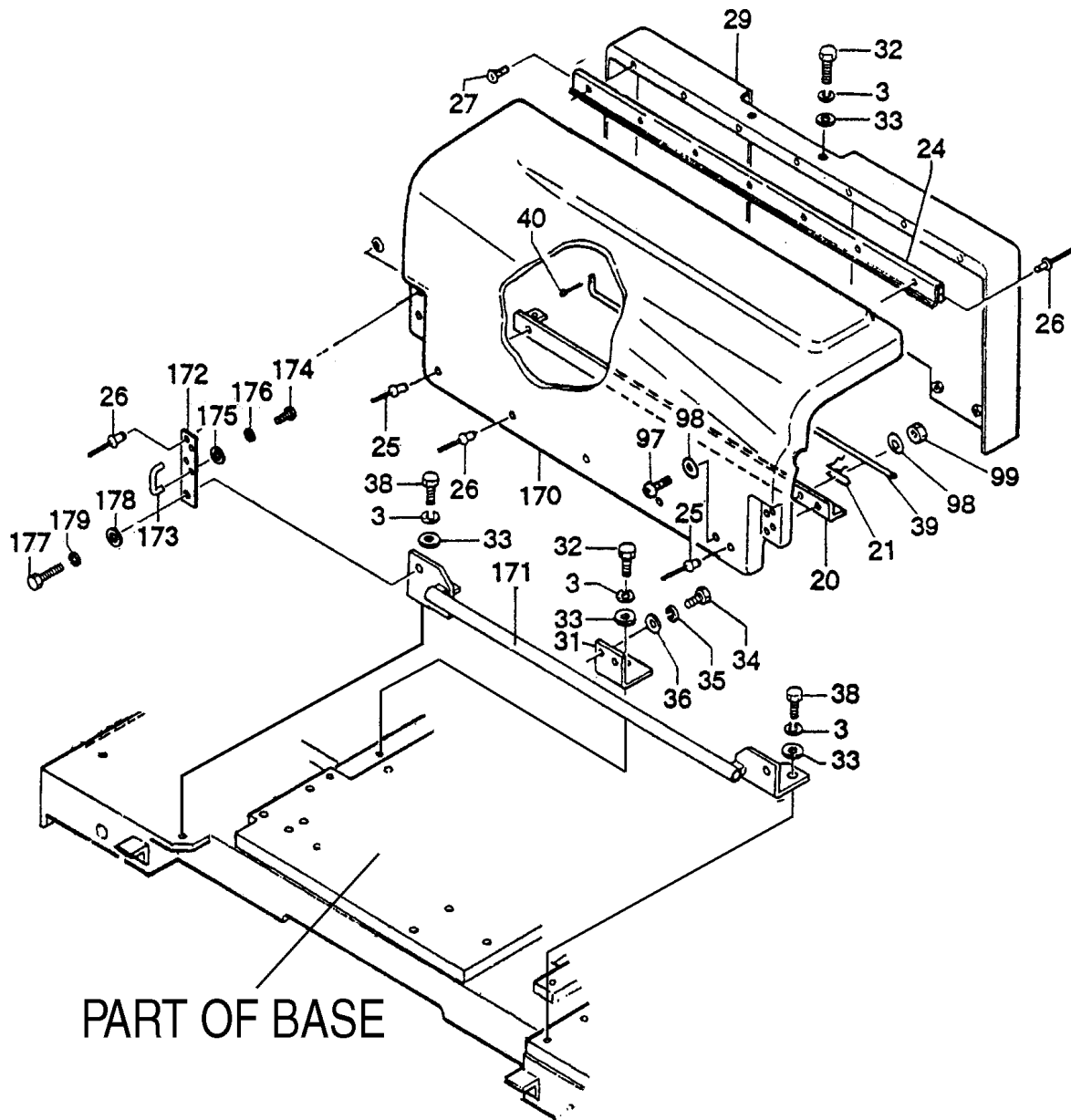
MRH-800DS VIBRATION ROLLER — FRONT GUARD ASSY.

FRONT GUARD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
75	031110160	FLAT WASHER, M10	2	
76	030210250	LOCK WASHER, M10	2	
77	001221035	BOLT 10x35 mm	2	
78	515336200	FRONT GUARD	1	
79	515336210	BUMPER	2	
80	515449720	SPACER, BUMPER	4	
81	001221040	BOLT 10X40 T	4	
82	031110160	WASHER, FLAT M10	4	
84	953405940	PIPE INSERT PZ-7	2	

MRH-800DS VIBRATION ROLLER — SIDE COVER ASSY.

SIDE COVER ASSY.



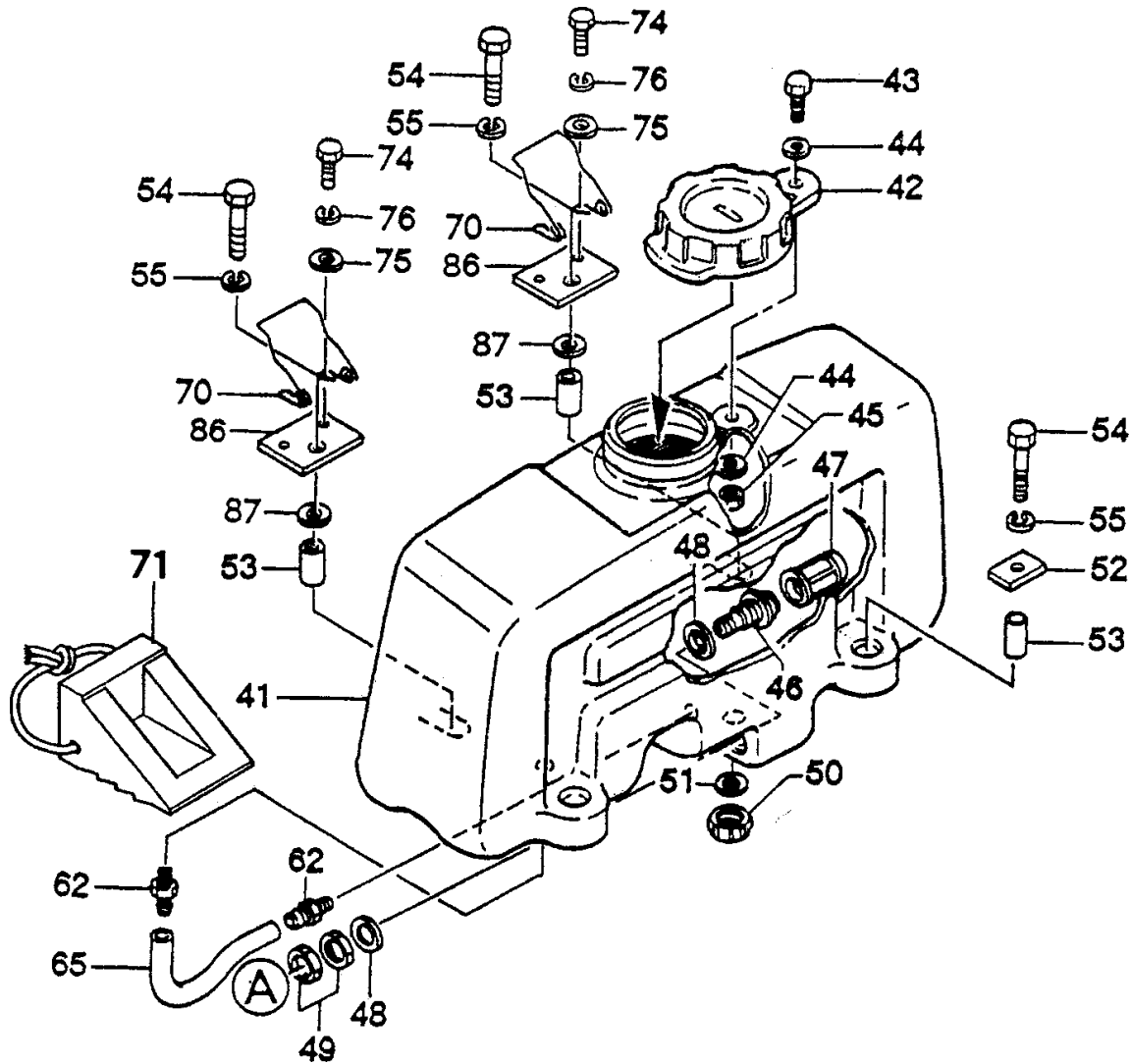
MRH-800DS VIBRATION ROLLER — SIDE COVER ASSY.

SIDE COVER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
3	030210250	WASHER, LOCK M10	9	
20	515336250	SUPPORT, COVER	1	
21	515449890	ROD HOLDER	1	
24	515334600	RUBBER HINGE	1	
25	515010090	RIVET	2	
26	515010100	RIVET	14	
27	092004008	SCREW 4X8	7	
29	515113080	COVER, E/G	1	
31	515447030	STAY, COVER (R)	1	
32	012210020	BOLT 10X20 T	5	REPLACES 001221020
33	031110160	WASHER, FLAT M10	7	
34	0105050616	BOLT 6X15 T	8	REPLACES 001220615
35	030206150	WASHER, LOCK M6	8	
36	952404470	WASHER, FLAT M6	8	REPLACES 031106100
38	0105091025	BOLT 10X25 T	2	REPLACES 001221025
39	515447380	ROD, COVER	1	
40	607010080	COTTER PIN 6	1	
97	091004016	SCREW 4X16	1	
98	031104080	WASHER, FLAT M4	2	
99	020304030	NUT M4	1	
170	515114870	COVER (EXP)	1	
171	515214240	STAY, COVER (EXP)	1	
172	515450780	HANDLE BRACKET	2	
173	515450790	HANDLE (COVER)	2	
174	091004015	SCREW 4X15	4	
175	031104080	WASHER, FLAT M4	4	
176	030204100	WASHER, LOCK M4	4	
177	001220815	BOLT 8X15 T	2	
178	031108160	WASHER, FLAT M8	2	
179	030208200	WASHER, LOCK M8	2	

MRH-800DS VIBRATION ROLLER — WATER TANK ASSY.

WATER TANK ASSY.



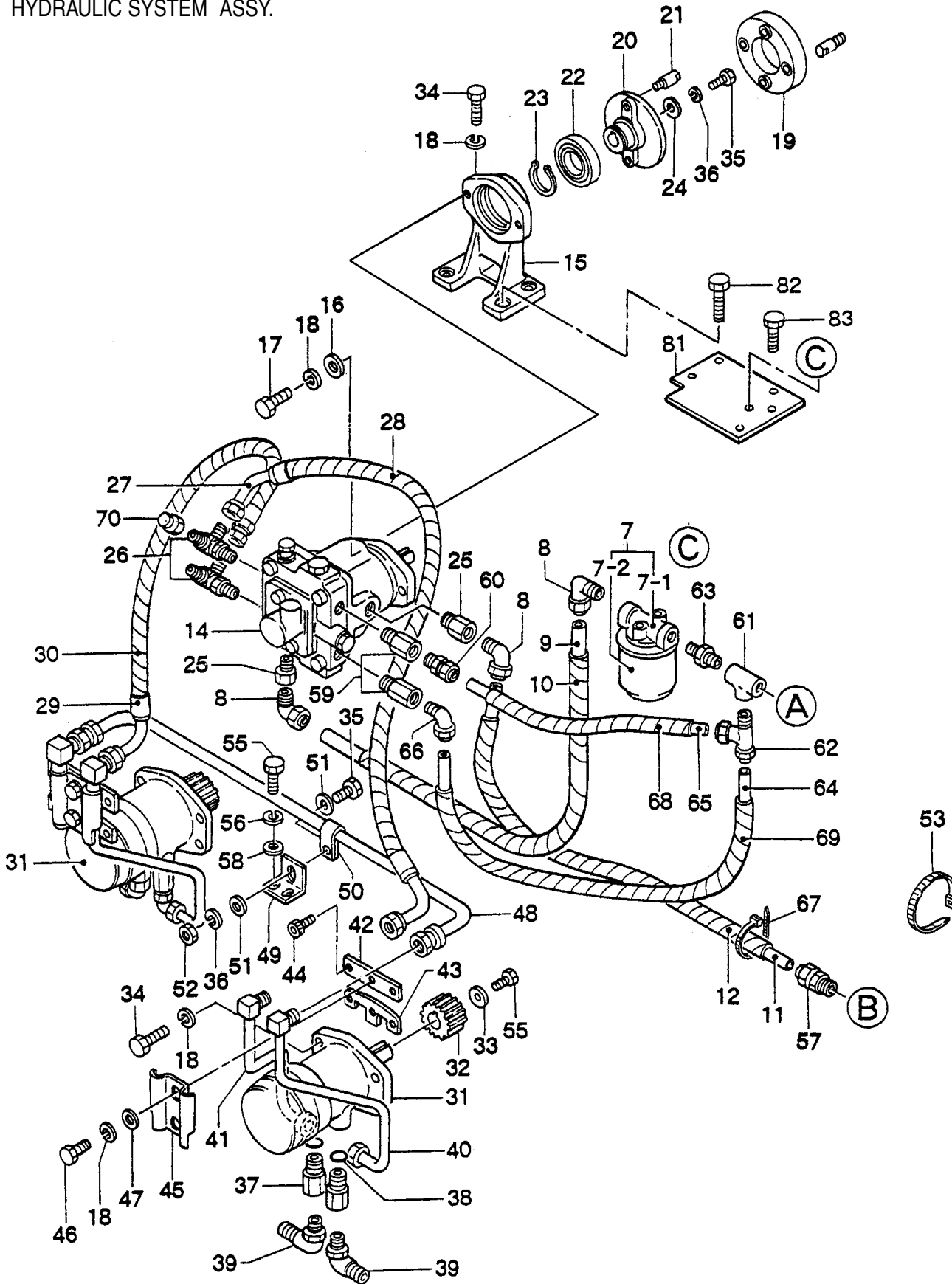
MRH-800DS VIBRATION ROLLER — WATER TANK ASSY.

WATER TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
41	515114200	WATER TANK	1	
42	954300340	CAP, WATER TANK /MR	1	
43	001241030	BOLT 10X30 U	1	
44	033910010	WASHER 10.5X21X2 SUS	2	
45	022910180	NYLON NUT M10 (SUS)	1	
46	954404910	HOSE JOINT 17D	1	
47	954404890	FILTER, TANK /MR	1	
48	953404900	PACKING 26X36X3	2	
49	959404880	NUT 3/4	2	
50	506403990	CAP PS1	2	
51	953404000	PACKING, CAP PS1	1	
52	506434680	STOPPER, FRONT	2	
53	506434690	SPACER, WATER TANK 39L	4	
54	001221253	BOLT 12X65 T	4	
55	030212300	WASHER, LOCK M12	4	
62	954405680	CONNECTOR 1/4x10	2	
65	515447000	WATER LOSE (T) 280	1	
70	515449870	HOLDER, STOPPER	2	
71	515448290	STOPPER	2	
71	517338540	STOPPER	2	
74	001220610	BOLT 6X10 T	4	
75	031106100	WASHER, FLAT M6	4	
76	030206150	WASHER, LOCK M6	4	
86	515449880	HOLDER (R)	2	
87	952405950	WASHER 13506	2	

MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.



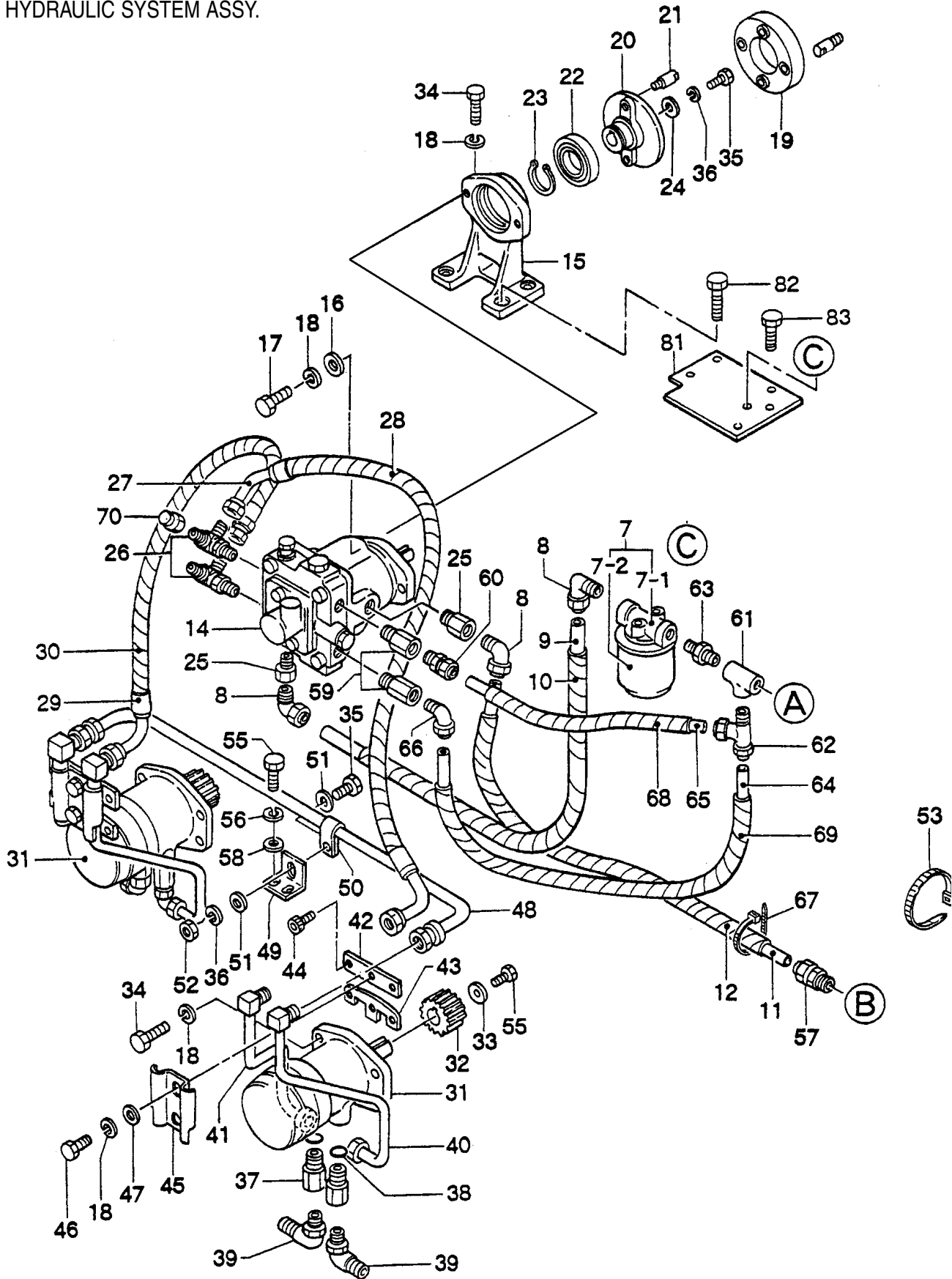
MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
7	954001350	OIL FILTER CPO 3-80	1	INCLUDES ITEMS W/*
7-1*	954001390	FILTER HEAD	1	
7-2*	954001380	OIL ELEMENT	1	
8	954001530	ELBOW LIN-1/2-PT3/8	3	
9	954001501	TUBE 9.6-12.7 - 300	1	
10	959020011	SPIRAL TUBE 11D-350L	1	
11	954001511	TUBE 9.6-12.7-360	1	
12	955404275	SPIRAL TUBE 11D-400L	1	
14	515010050	OIL PUMP PV10-610	1	
14	515010110	OIL PUMP PV10 -625	1	
15	515114390	BRACKET (PV10)	1	
16	952404110	COLLAR 10225	2	
17	012210035	BOLT 10X35 T	2	REPLACES 001221035
18	030210250	WASHER, LOCK M10	22	
19	515334070	COUPLING	1	
20	515334080	FLANGE (PV10)	1	
21	515447020	COUPLING PIN	2	
22	046006009	BEARING 6009DDU	1	
23	080200450	STOP RING S -45	1	
24	952400450	WASHER 7X30X4.5	1	
25	954001460	BUSHING CP-3/8	2	
26	954001710	ELBOW PF3/8 - PF1/4X2	2	
27	954001370	OIL HOSE ML90-ML90X560	1	
27	954001830	OIL HOSE ML90-ML90X560 BS	1	
28	959020013	SPIRAL TUBE 11D-600L	1	
29	516010080	OIL HOSE ML90-1005X600	1	
29	954001840	OIL HOSE ML90-1005X600 BS	1	
30	955404270	SPIRAL TUBE/11D-700L	1	
31	515010040	OIL MOTOR K2355(BLUE)	2	
32	515446940	PINION (12)	2	
33	952400130	WASHER 9304	2	
34	012210035	BOLT 10X35 T	14	REPLACES 001221035
35	0105050616	BOLT 6X15 T	2	REPLACES 001220615
36	030206150	WASHER, LOCK M6	2	
37	515447130	JOINT 1/2-3/8-31	4	
38	050210180	O-RING P-18-1B	4	
39	512010120	JOINT, LLM-UE-10X3/8-B	4	
40	515447110	PIPE, OM-A-E	2	
41	515447120	PIPE, OM-B-E	2	

MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.



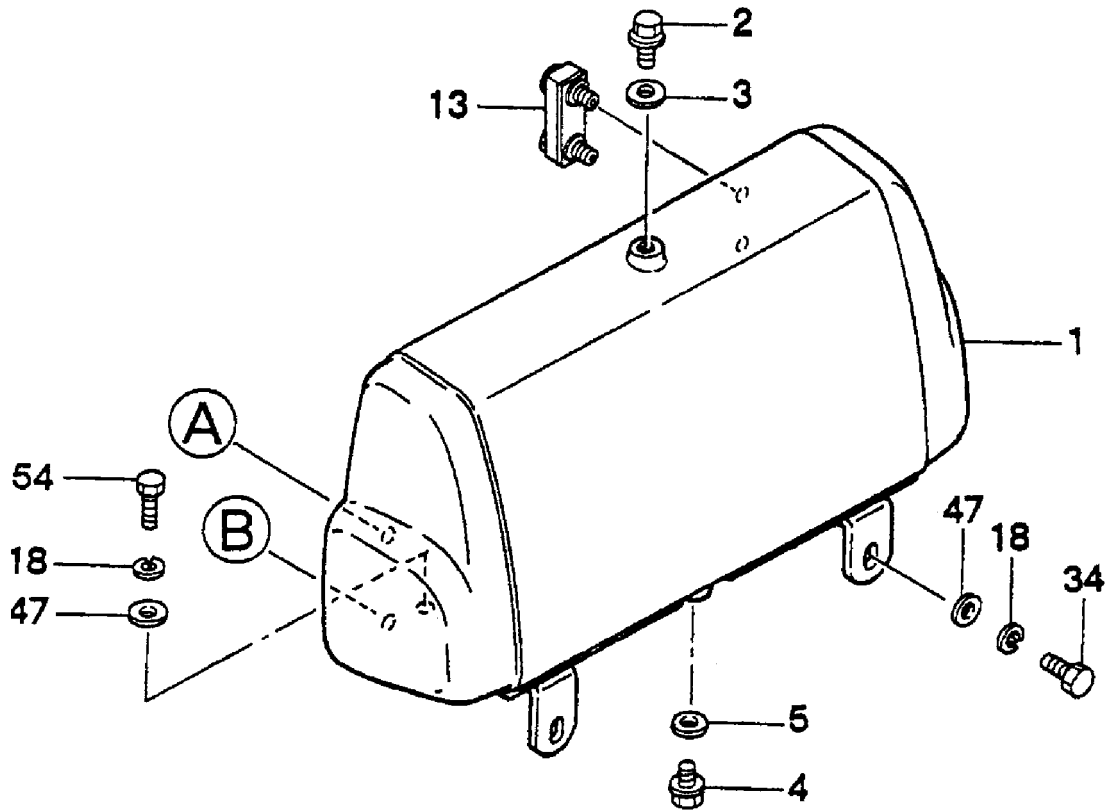
MRH-800DS VIBRATION ROLLER — HYDRAULIC SYSTEM ASSY.

HYDRAULIC SYSTEM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
42	515447160	HOLDER, UPPER	2	
43	515447170	HOLDER, LOWER	2	
44	001520820	SOCKET HEAD BOLT 8X20 T	8	
45	515447140	COVER, PIPE	2	
46	012210020	BOLT 10X20 T	4	REPLACES 001221020
47	031110160	WASHER, FLAT M10	8	
48	515447150	PIPE, OM-B--OM-A	1	
49	515447300	STAY, PIPE	1	
50	607010040	CLAMP CLA-3200 (7D)	1	
51	952404470	WASHER, FLAT M6	2	REPLACES 031106100
52	020106050	NUT M6	1	REPLACES 020306050
53	507010110	CLAMP TC-200	5	
55	014208020	BOLT 8X20 T	4	REPLACES 001220820
56	030208200	WASHER, LOCK M8	2	
57	954001520	ADAPTER CIN-1/2XPT3/8	1	
58	031108160	WASHER, FLAT M8	2	
59	515335300	CHECK VALVE 7/16	2	
60	954001090	ADAPTER CIN-3/8-PT1/4	1	
61	954001010	JOINT PT3/8	1	
62	954001620	FITTING, TEE STIN3/8-PT3/8	1	
63	954001630	NIPPLE PT3/8	1	
64	954001650	TUBE 9.5D-7D-370	1	
65	954001640	TUBE 9.5D-7D-290	1	
66	954001100	ELBOW LIN-3/8-PT1/4	1	
67	454010020	CLAMP TC-100	12	
68	959021817	SPIRAL TUBE 6D-350L	1	
69	959021818	SPIRAL TUBE 6D-510L	1	
70	954001040	CAP PF1/4	2	
81	515335451	SPACER (PV10)	1	
82	0109051045	BOLT 10X40 T	4	REPLACES 001221040
83	012010030	BOLT 10X30 T	2	REPLACES 001221030
84	515447020	COUPLING PIN	2	

MRH-800DS VIBRATION ROLLER — HYDRAULIC OIL TANK ASSY.

HYDRAULIC OIL TANK ASSY.



(A) NOTE:
SEE PAGE 52 FOR
(B) OIL TANK HOSE
CONNECTIONS

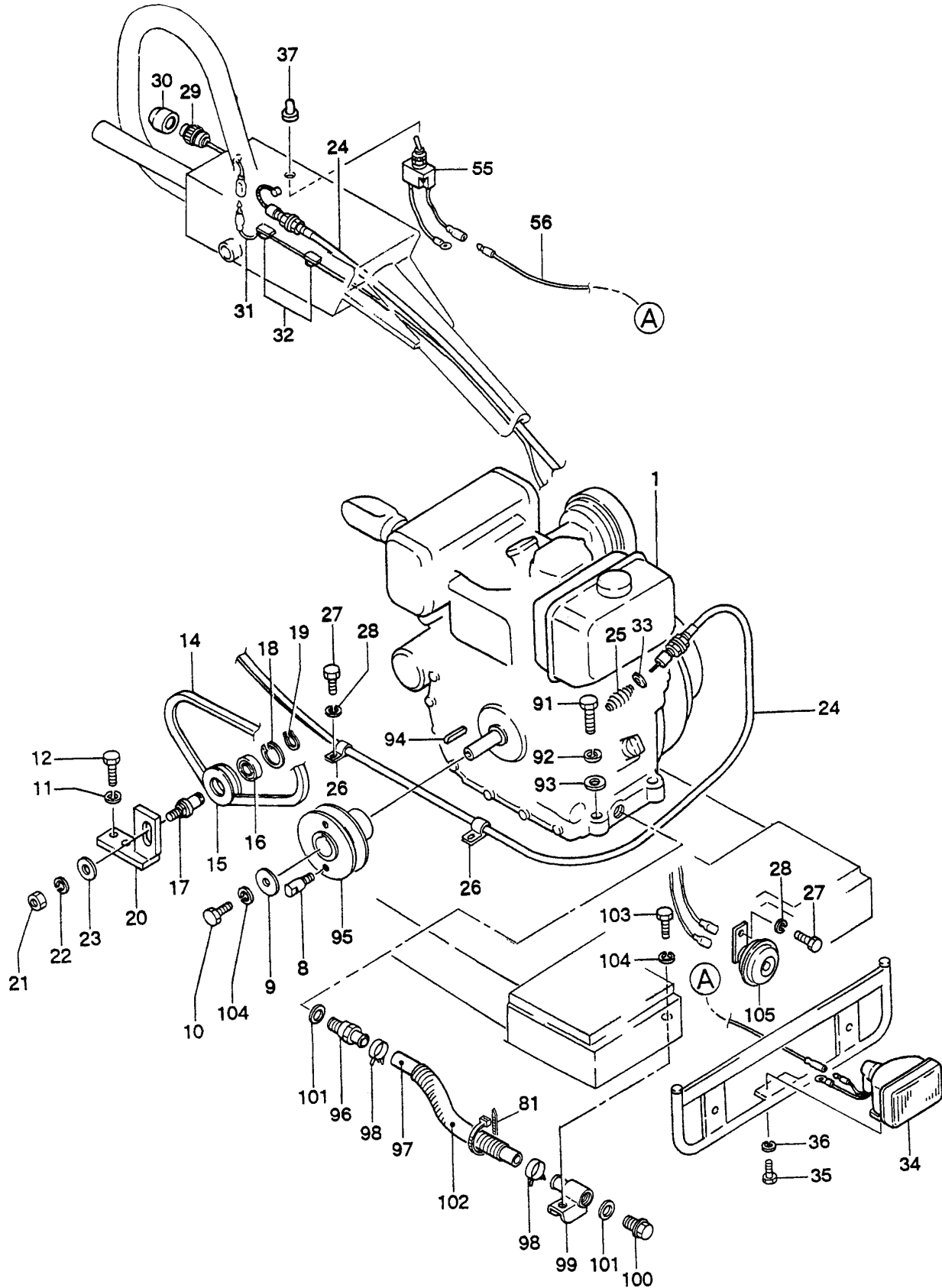
MRH-800DS VIBRATION ROLLER — HYDRAULIC OIL TANK ASSY.

HYDRAULIC OIL TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	515114221	OIL TANK , (GREEN)	1	
1	515010140	OIL TANK , (ORANGE)	1	
2	953405840	DRAIN PLUG M18	1 REPLACES 953102781
3	953402930	COPPER PACKING 19X30X1	1	
4	953400270	PLUG 1/4X14 10L	1	
5	953405260	PACKING 1/4 (CU)	1	
13	959010120	LEVEL GAUGE/L =60	1	
18	030210250	WASHER, LOCK M10	22	
34	012210035	BOLT 10X35 T	14 REPLACE)S 001221035
47	031110160	WASHER, FLAT M10 IN SYSTEM	8	
54	0105091025	BOLT 10X25 T	2 REPLACES 001221025

MRH-800DS VIBRATION ROLLER — ENGINE ASSY.

ENGINE ASSY. (YANMAR L100EE-DEVMK2)



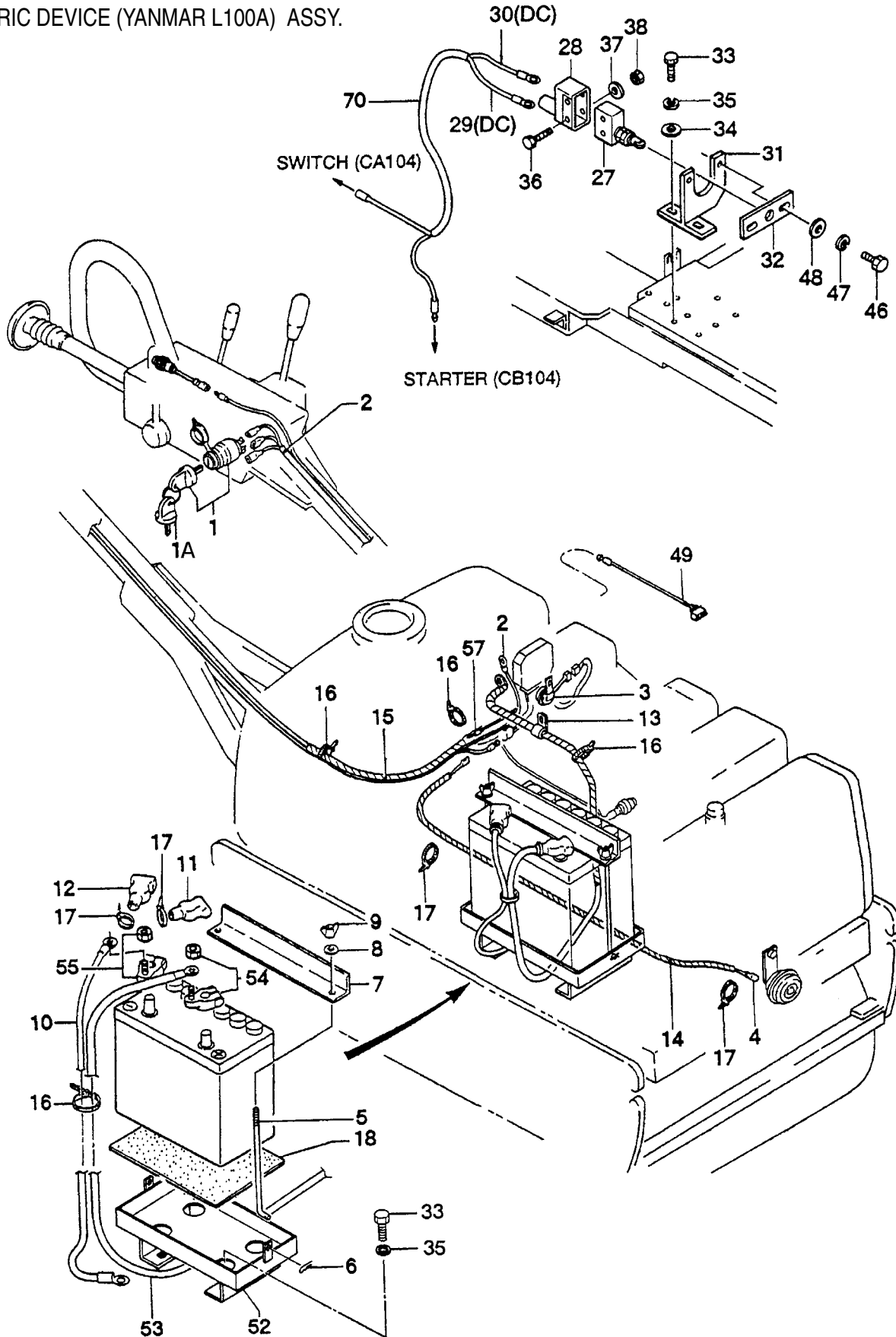
MRH-800DS VIBRATION ROLLER — ENGINE ASSY.

ENGINE ASSY. (YANMAR L100EE-DEVMK2)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	914410004	ENGINE ASSY. L100EE-DEVMK2	1	
8	515447020	COUPLING PIN	2	
9	952400690	WASHER 9X35X4.5	1	
10	011208025	BOLT 8X25 T	1	REPLACES 001220825
11	030210250	WASHER M10	2	
12	012010030	BOLT 10X30 T	2	REPLACES 001221030
14	070503000	V-BELT 3V- 300	1	
15	515447050	TIGHTENER PULLEY	1	
16	046006004	BEARING 6004DDU	1	
17	515447060	SHAFT, TIGHTENER	1	
18	080100420	STOP RING R-42	1	
19	080200200	STOP RING S-20	1	
20	515334180	HOLDER, TIGHTNER	1	
21	020314110	NUT M14	1	
22	030214350	WASHER M14	1	
23	031114260	WASHER M14	1	
24	956100022	THROTTLE WIRE 2560-2700	1	
25	2344600201	RETURN SPRING	1	
26	607010040	CLAMP CLA-3200 (7D)	2	
27	011006010	BOLT 6X10 T	3	
28	030206150	WASHER M6	3	
29	955400800	HORN BUTTON ASS'Y	1	
30	955405980	COVER, HORN BUTTON	1	
31	515447320	READ CORD, HORN (WASHER, LOCK)	1	
32	955405710	WIRE CLAMP	2	
33	031104080	WASHER M4	1	
34	955200030	HEAD LAMP AY 12V-25W	1	
35	0105050616	BOLT 6X15 T	2	REPLACES 001220615
36	030206150	WASHER M6	2	
37	304402600	CAP	1	
55	515447740	SWITCH W/CORD	1	
56	515449920	READ CORD (LAMP)	1	
81	506010070	CLAMP TC-150	3	
91	012210040	BOLT 10X40 T	4	REPLACES 001221040
92	030210250	WASHER M10	4	
93	031110160	WASHER M10	4	
94	951405770	KEY 7X7X36 RR	1	
95	515338240	ENGINE PULLEY 130D (L100)	1	
96	515448720	NIPPLE, DRAIN	1	
97	515448730	PIPE, OIL DRAIN	1	
98	515448740	HOSE CLIP	2	
99	515448750	JOINT, DRAIN	1	
100	515448760	DRAIN PLUG	1	
101	515448770	SEAL WASHER	2	
102	959026011	TUBE 20D-300L	1	
103	014208020	BOLT 8X20 T	1	REPLACES 001220820
104	030208200	WASHER M8	2	
105	955300420	HORN (DC12V)	1	

MRH-800DS — ELECTRIC DEVICE

ELECTRIC DEVICE (YANMAR L100A) ASSY.



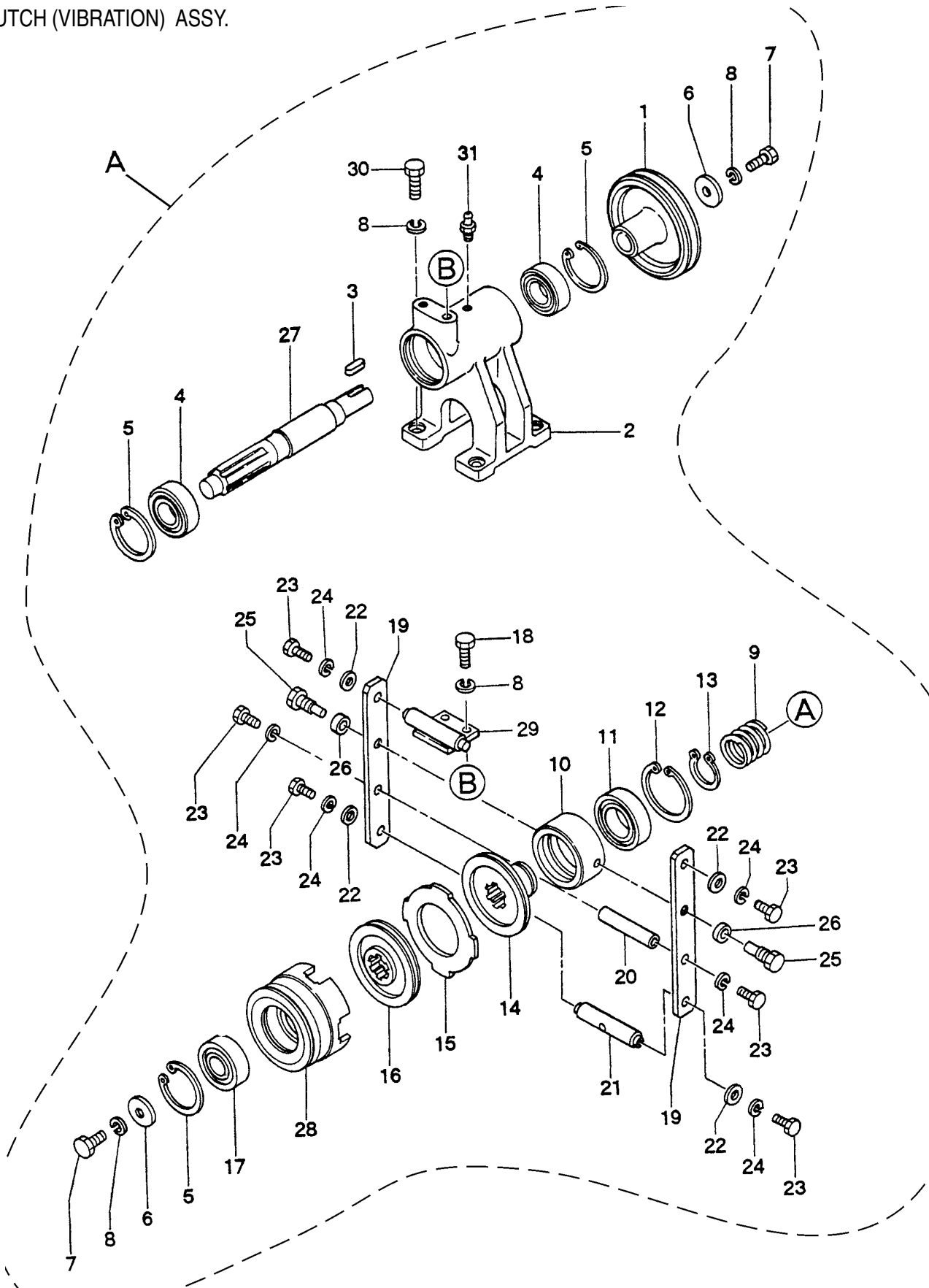
MRH-800DS — ELECTRIC DEVICE

ELECTRIC DEVICE (YANMAR L100A) ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	457333310	KEY SWITCH	1	INCLUDES ITEMS W/*
1A*	955000010	KEY, PAIR	1	
2	515449680	WIRE HARNESS (L100)	1	
3	955300400	BUZZER (EBL)	1	
4	515449860	HARNESS (L1200)	1	
5	515448210	ROD, BATTERY	2	
6	607010080	COTTER PIN 6	2	
7	515447370	HOLDER, BATTERY	1	
8	952404470	WASHER M6	2	REPLACES 031106100
9	0037806000	WING NUT M6	2	REPLACES 022410616
10	515447360	BATTERY CORD (-)	1	
11	955300500	TERMINAL COVER (+)	1	
12	955300510	TERMINAL COVER (-)	1	
13	954404230	CLAMP SA120-18	1	
14	959021812	SPIRAL TUBE 6D-800L	1	
15	959021811	SPIRAL TUBE 6D-400L	1	
16	507010110	CLAMP TC-200	3	
17	506010070	CLAMP TC-150	10	
18	601303150	RUBBER PLATE 160-226-1T	1	
27	955405910	MICRO-SWITCH	1	
28	955405450	COVER, MICRO-SWITCH	1	
29	515449840	READ CORD 550L (COM-ST)	1	
30	515449850	READ CORD 550L (N,C-ST)	1	
31	515337110	HOLDER, MICRO-SWITCH	1	
32	515449230	PLATE, MICRO-SWITCH	1	
33	012210020	BOLT 10X20 T	6	REPLACES 001221020
34	031110160	WASHER M10	2	
35	030210250	WASHER M10	6	
36	001200430	BOLT 4X30	2	
37	031104080	WASHER M4	2	
38	022710405	NYLON NUT M4	2	
46	0105050616	BOLT 6X15 T	2	REPLACES 001220615
47	030206150	WASHER M6	2	
48	952404470	WASHER M6	2	REPLACES 031106100
49	515450380	WIRE HARNESS	1	
52	516335040	BASE BATTERY	1	
53	515448530	BATTERY CORD (+) 1100L	1	
54	955300480	BATTERY TERMINAL (+)	1	
55	955300490	BATTERY TERMINAL (-)	1	
57	515448520	LEAD CORD 50L	1	
70	515453230	READ CORD (M-SWITCH) 550L-2	1	

MRH-800DS VIBRATION ROLLER — CLUTCH (VIBRATION) ASSY.

CLUTCH (VIBRATION) ASSY.



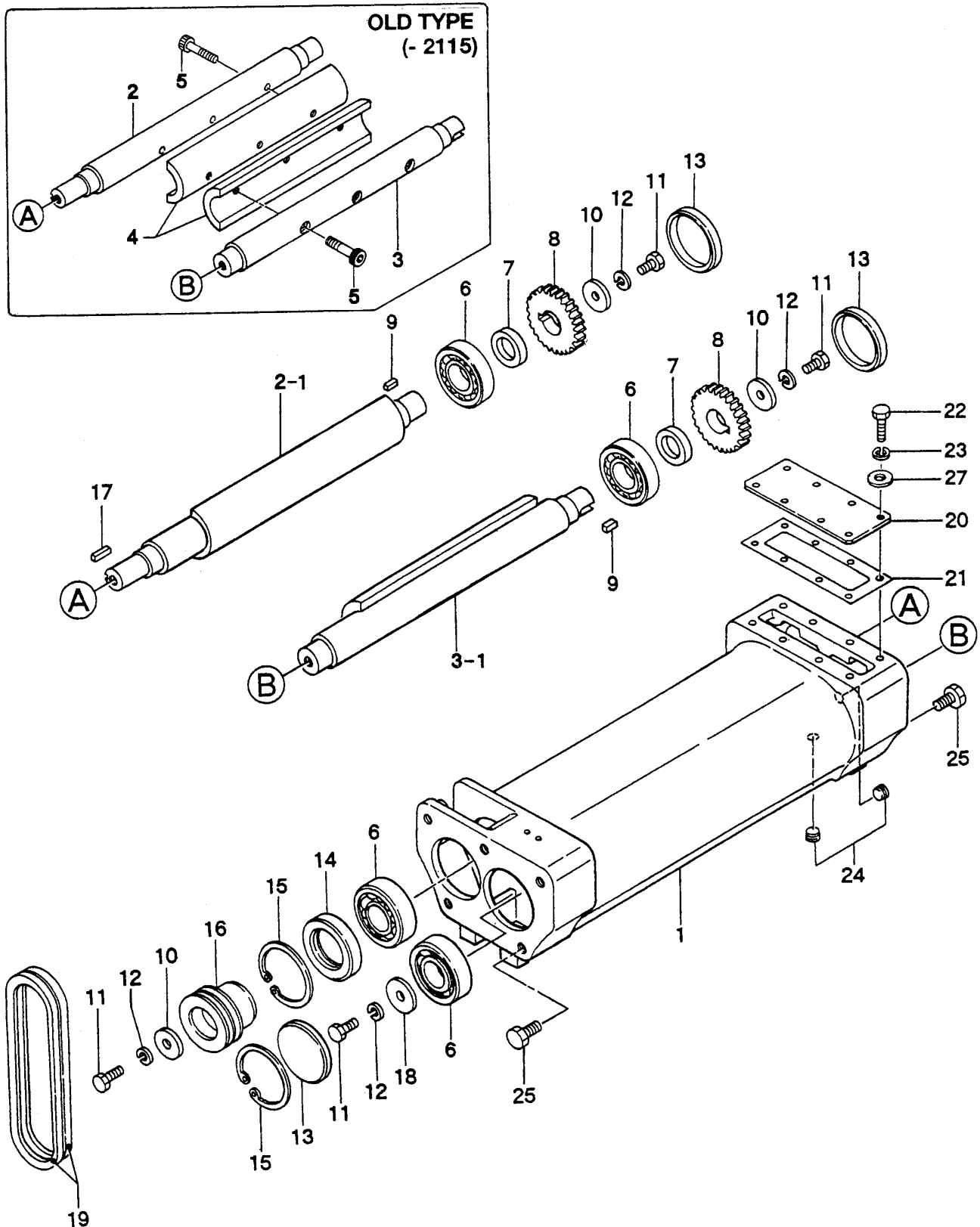
MRH-800DS VIBRATION ROLLER — CLUTCH (VIBRATION) ASSY.

CLUTCH (VIBRATION) ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
A	515910010	CLUTCH AY (VIB.)	1	INCLUDES ITEMS W/*
1*	515447070	COUNTER PULLEY 130D-3V1	1	
2*	515212980	COUNTER BRACKET	1	
3*	951403020	KEY 7X7X26	1	
4*	043006206	BEARING 6206V	2	
5*	080100620	STOP RING R-62	3	
6*	952402470	WASHER 11366	2	
7*	012010030	BOLT 10X30 T	2	REPLACES 001221030
8*	030210250	WASHER M10	8	
9*	509434770	CLUTCH SPRING	1	
10*	509434780	RELEASE COLLAR 62X78X40	1	
11*	044006008	BEARING 6008VV	1	
12*	080100680	STOP RING R-68	1	
13*	080200400	STOP RING S-40	1	
14*	515447080	PRESSURE PLATE	1	
15*	515447090	INSIDE PLATE	1	
16*	515447100	DISC PLATE	1	
17*	044006305	BEARING 6305VV	1	
18*	012210020	BOLT 10X20 T	2	REPLACES 001221020
19*	509324690	RELEASE FORK	2	
20*	509434850	STUD BAR 18D X80L	1	
21*	509434860	LOCK, WIRE	1	
22*	952401690	WASHER 7173	4	
23*	010505506	BOLT 6X15 T	6	REPLACES 001220615
24*	030206150	WASHER M6	6	
25*	509434870	FORK PIN	2	
26*	509434880	COLLAR, FORK PIN 12.5X20X5	2	
27*	515334200	COUNTER SHAFT	1	
28*	515334210	CLUTCH PULLEY 113D-A2	1	
29*	409434840	BRACKET, RELEASE FORK	1	
30*	012010030	BOLT 10X30 T	4	REPLACES 001221030
31*	505015060	GREASE FITTING A-PT1/8	1	REPLACES 301010100

MRH-800DS VIBRATION ROLLER — VIBRATOR ASSY.

VIBRATOR ASSY.



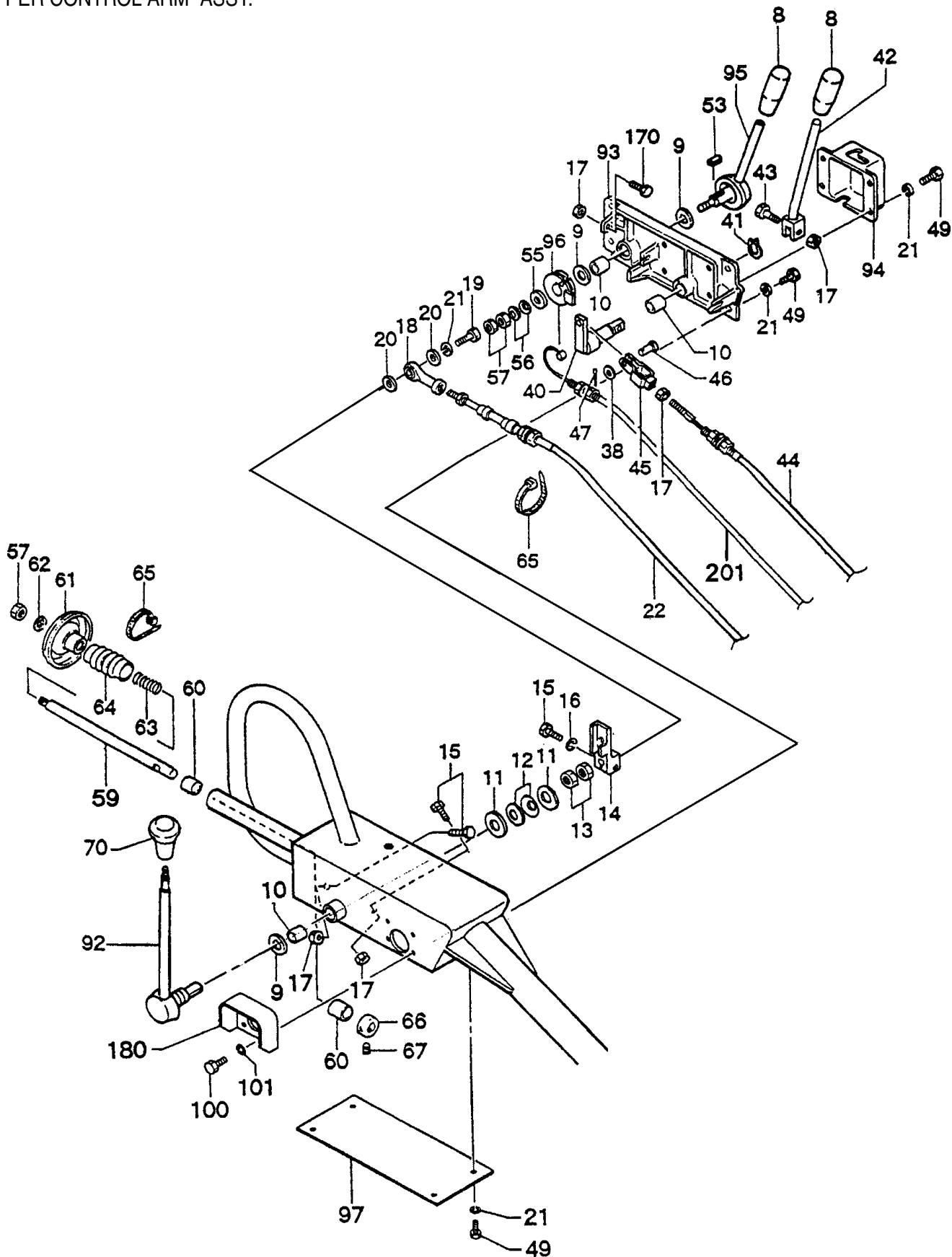
MRH-800DS VIBRATION ROLLER — VIBRATOR ASSY.

VIBRATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	515113090	VIBRATING CASE	1	
2	515334110	ROTARY SHAFT, DRIVE	1	- 215 #2
2-1	515334111	ROTARY SHAFT, DRIVE	1	F2116- *2
3	515334120	ROTARY SHAFT, DRIVEN	1	- 2115 #2
3-1	515334121	ROTARY SHAFT, DRIVEN	1	F2116-*2
4	515334130	ECCENTRIC ROTATOR	2	- 2115 #2
5	001521252	SOCKET HEAD BOLT 12X60 T	6	- 2115 #2
6	040406308	BEARING 6308C4	4	
7	501011020	GEAR SPACER	2	
8	501011000	GEAR 38	2	
9	951400080	KEY 10X8X17	2	REPLACES 951400081
10	952400900	WASHER 13446	3	
11	012212030	BOLT 12X30 T	4	REPLACES 001221230
12	030212300	WASHER M12	4	
13	953405570	SEAL CAP SC- 90-10	3	
14	060206020	OIL SEAL SC- 659013	1	
15	080100900	STOP RING R-90	2	
16	515447040	PULLEY 86D-A2	1	
17	951400090	KEY 10X8X33	1	
18	952401590	WASHER 13X50X6	1	
19	070100381	V-BELT A- 38 RED	2	
20	515334140	COVER, GEAR	1	
21	515334150	PACKING, COVER	1	
22	014208020	BOLT 8X20 T	8	REPLACES 001220820
23	030208200	WASHER M8	8	
24	894230	PLUG PT1/4	2	REPLACES 505015380
25	001221430	BOLT 14X30 T	10	
25	001221425	BOLT 14X25 T	10	F2116-
27	031108160	WASHER M8	8	

MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY.

UPPER CONTROL ARM ASSY.



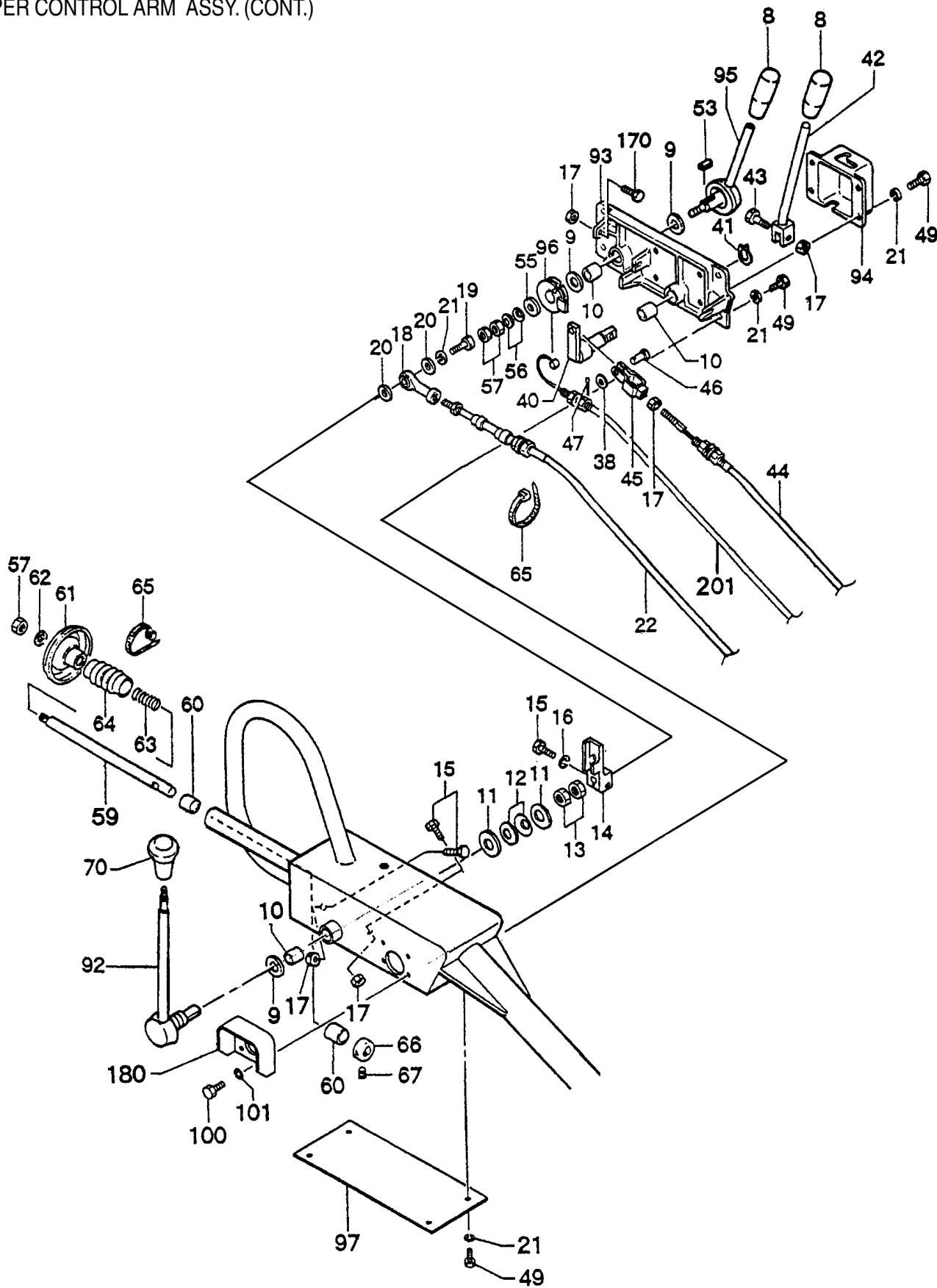
MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY.

UPPER CONTROL ARM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
8	959403840	BAR GRIP, I.D. 12MM	2	
9	953402930	COPPER PACKING 19X30X1	3	
10	509010130	BUSHING MB1825DU	3	
11	952405700	WASHER 19X49X0.6	2	
12	952403690	CONICAL SPRING WASHER M18	2	
13	020418110	NUT M18, H=11	2	
14	515447410	LEVER JOINT, TRAVELLING	1	
15	011208030	BOLT 8X30 T	3	REPLACES 001220830
16	030208200	WASHER, LOCK M8	3	
17	02108060	NUT M8	5	REPLACES 020308060
18	501011162	ROD END PR6-209	2	
19	011206020	BOLT 6X20 T	1	REPLACES 001220620
20	952404470	WASHER 6.5X15X1.6	4	
21	030206150	WASHER, LOCK M6	14	
22	515334230	CABLE AY 33050E1700	1	
40	509326970	SHAFT, LEVER	1	
41	080200180	STOP RING S-18	1	
42	509436911	LEVER, VIB.	1	
43	011208035	BOLT 8X35 T	1	REPLACES 001220835
44	515334240	CABLE ASSY., VIBRATION	1	
45	959404760	CLEVIS 8D X44	1	
46	959404370	PIN 8X22	1	
47	025910080	SNAP PIN /SSP-8	1	
49	0105050616	BOLT 6X15 T	12	REPLACES 001220615

MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY. (CONT.)

UPPER CONTROL ARM ASSY. (CONT.)



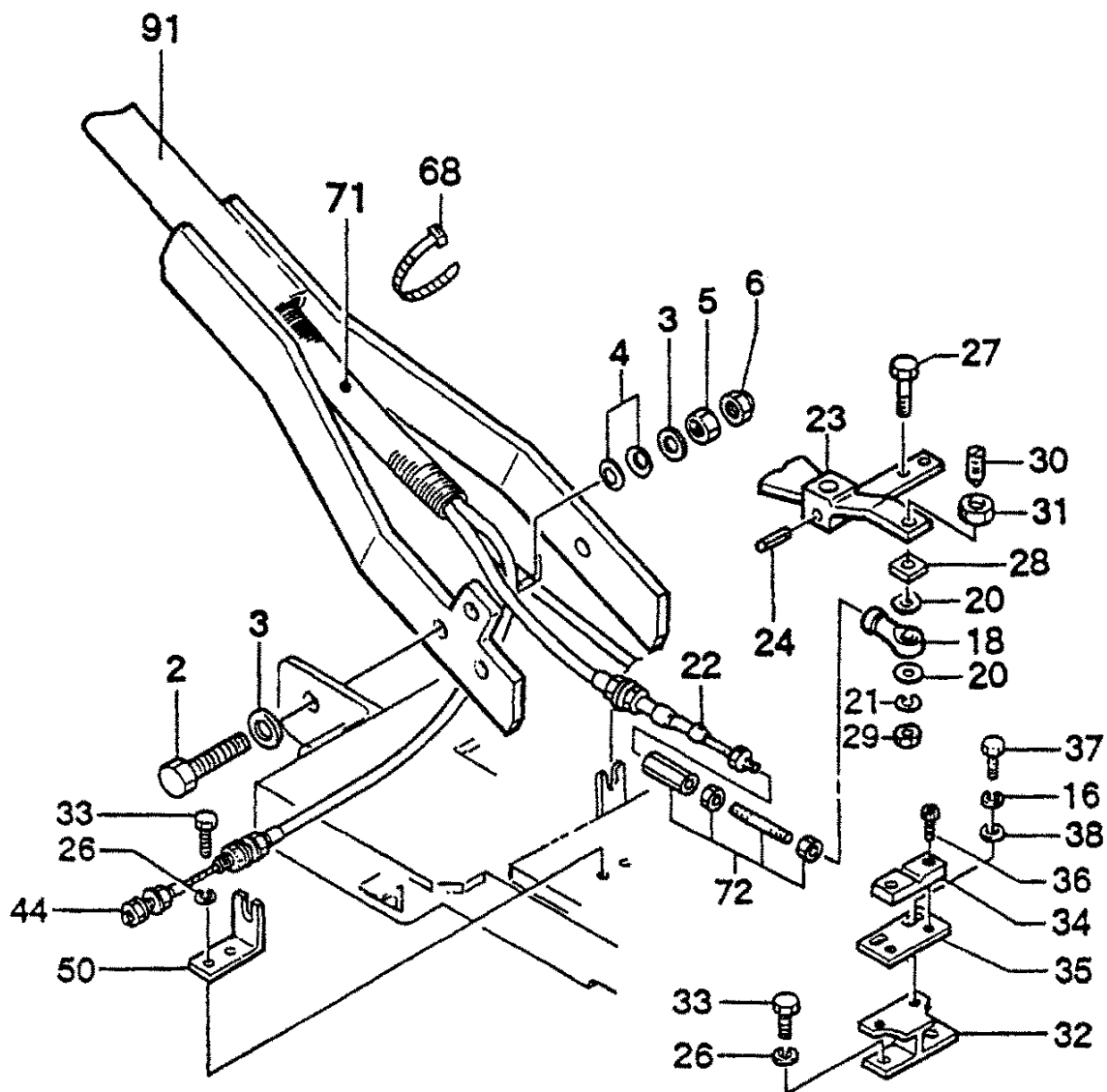
MRH-800DS VIBRATION ROLLER — UPPER CONTROL ARM ASSY. (CONT.)

UPPER CONTROL ARM ASSY. (CONT.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
53	951401431	KEY 5X5X8	1	
55	952404790	WASHER 13306	1	
56	032212250	CONICAL SPRING WASHER M12	2	
57	0039312000	NUT M12	3	REPLACES 020312100
59	515334820	ROD	1	
60	509010140	BUSHING MB1625DU	2	
61	515447720	DISC PLATE, DEAD-MAN	1	
62	030212300	WASHER, LOCK M12	1	
63	509436980	SPRING, DEAD-MAN	1	
64	509436990	PROTECTOR, DEAD-MAN	1	
65	507010110	CLAMP TC-200	2	
66	509436960	ROD STOPPER, DEAD-MAN	1	
67	014206010	SOCKET HEAD SCREW 6X6 T	2	REPLACES 099206006
70	959405920	KNOB 44D-78L	1	
92	515336490	TRAVELLING LEVER 260L	1	
93	515212950	LEVER SUPPORT, VIB. E/G	1	
94	515334460	LEVER COVER, VIB.	1	
95	515336500	LEVER, E/G 133L	1	
96	509326320	GUIDE, WIRE (E/G)	1	
97	509436950	COVER, HANDLE BOX	1	
100	011006010	BOLT 6X10 T	4	REPLACES 001220610
101	030206150	WASHER, LOCK M6	4	
170	011208030	BOLT 8X30 T	1	REPLACES 001220830 FOR L100
180	517338590	COVER (FOR KEY SWITCH)	1	
201	956100022	THROTTLE WIRE	1	

MRH-800DS VIBRATION ROLLER — LOWER CONTROL ARM ASSY.

LOWER CONTROL ARM ASSY.



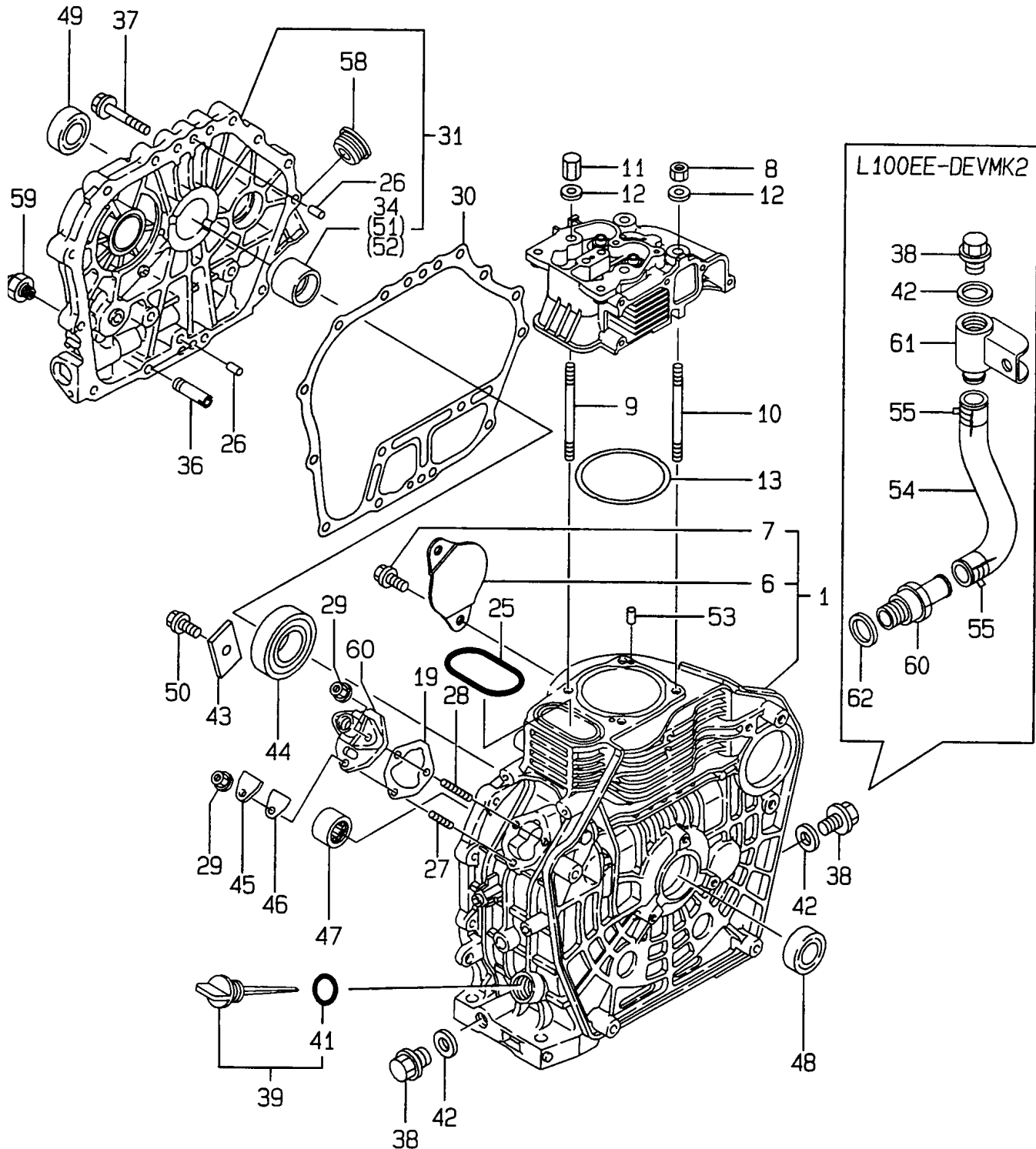
MRH-800DS VIBRATION ROLLER — LOWER CONTROL ARM ASSY.

LOWER CONTROL ARM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	001222055	BOLT 20X75 T	2	
3	031120320	WASHER, FLAT M20	1	
4	032220450	CONICAL SPRING WASHER M20	4	
5	020320160	NUT M20	2	
6	022522017	LOCK NUT U-M20	2	
16	030208200	WASHER, LOCK M8	3	
18	501011162	ROD END PR6-209	2	
20	952404470	WASHER 6.5X15X1.6	4	
21	030206150	WASHER, LOCK M6	14	
22	515334230	CABLE AY 33050E1700	1	
23	515335780	LEVER (PV10), E- START	1	
24	025406032	SPRING PIN 6X32	1	
26	030210250	WASHER, LOCK M10	4	
27	001220635	BOLT 6X35 T	1	
28	515450560	SPACER (PV10)	1	
29	022710607	NYLON NUT M6	1	
30	505015150	SPRING PLUNGER	1	
31	020116130	NUT M16, H=10	1	REPLACES 020416100
32	509321160	GUIDE HOLDER	1	
33	012210020	BOLT 10X20 T	4	REPLACES 00122120
34	515448170	GUIDE	1	
35	515448180	SLIDE PLATE	1	
36	014206015	SOCKET HEAD BOLT 6X15 T	2	REPLACES 001520615
37	011008015	BOLT 8X15 T	2	REPLACES 001220815
38	031108160	WASHER, FLAT M8	3	
44	515334240	CABLE AY (VIB.)	1	
50	515447180	CABLE SUPPORT, VIB.	1	
68	506010070	CLAMP TC-150	8	
71	959021911	TUBE 25D-850L	1	
72	501910010	TURN BUCKLE ASS'Y.	1	
91	515115910	HANDLE	1	

YANMAR L100EE DEVMK2 — CYLINDER BLOCK ASSY.

CYLINDER BLOCK ASSY.



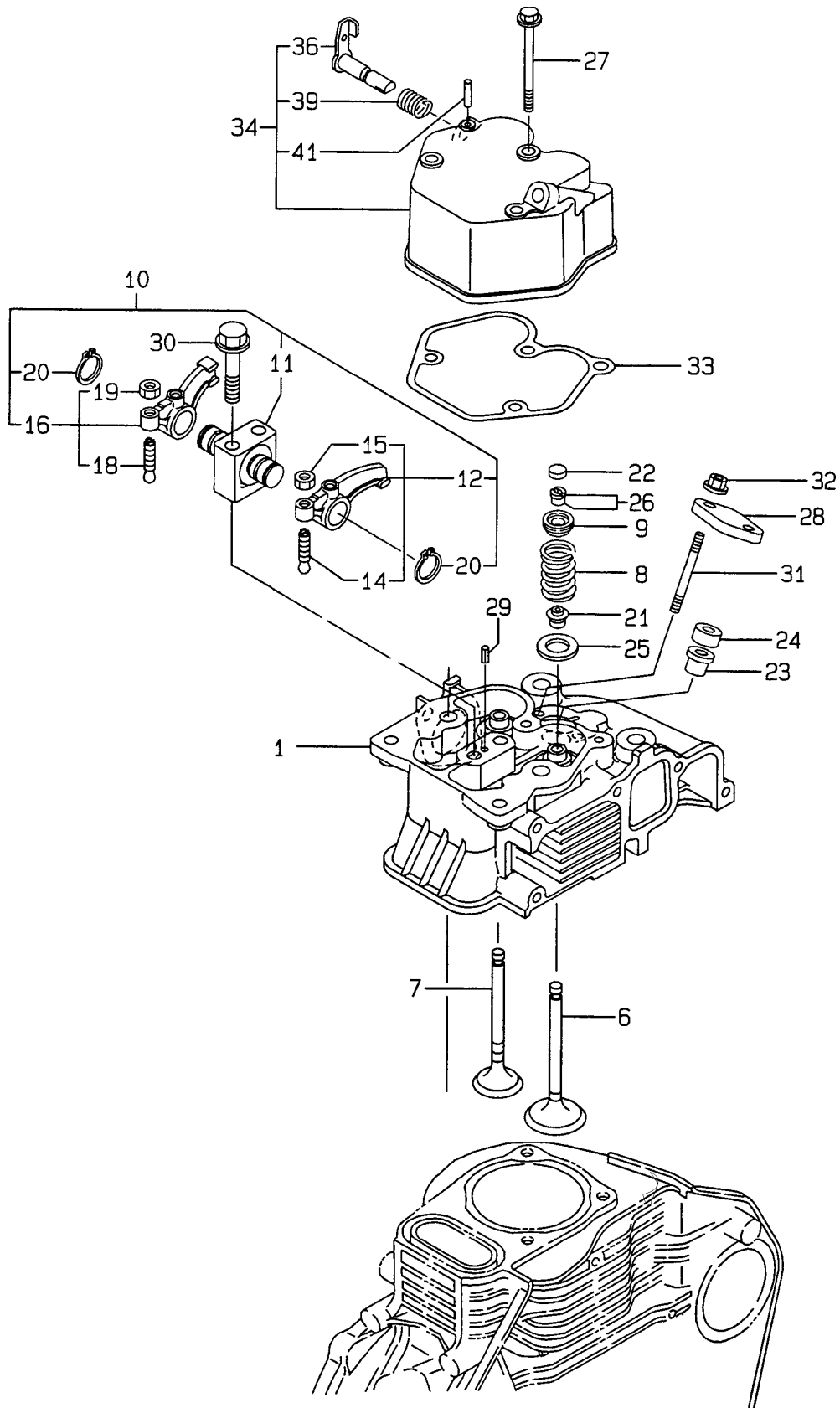
YANMAR L100EE DEVMK2 — CYLINDER BLOCK ASSY.

CYLINDER BLOCK ASSY.

NO	PART NO	PART NAME	QTY.	REMARKS
1	71497001560	BLOCK ASSY. CYLINDER	1	INCLUDES ITEMS W/*
6*	11435001700	COVER, STARTER	1	
7*	26106100122	BOLT M10X 12 PLATED	2	
8	10502501220	NUT 10	2	
9	11465001230	STUD, CYLINDER HEAD	2	
10	11465001240	STUD, CYLINDER HEAD	2	
11	11465001250	NUT 10	2	
12	11465001260	WASHER	4	
13	11465101330	GASKET, CYLINDER HEAD CMP	1	
19	11425001800	SHIM SET	1	
25	11465001380	O-RING	1	
26	11427001600	PARALLEL PIN 8 X 12	2	
27	26226060182	STUD M 6 X 18 PLATED	1	
28	26226060222	STUD M 6 X 22 PLATED	2	
29	26366060002	NUT M 6	3	
30	11465001412	GASKET CRANKCASE	1	
31	11466001471	COVER D, CRANKCASE	1	INCLUDES ITEMS W/+
34+	11465002100	BEARING, MAIN	1	
36	11425035150	PIPE, L.O. INLET	1	
37	26106080352	BOLT M 8 X 35 PLATED	16	
38	10542501690	PLUG M16	2	
39	11469901760	CAP, W/LUB.OIL GAUGE	1	INCLUDES ITEMS W/#
41#	11429901950	O-RING	1	
42	22190160002	SEAL WASHER 16S	2	
43	11429902030	RETAINER	1	
44	11465002150	BALL BEARING	1	
45	11425001830	COVER, INSPEC. WINDOW	1	
46	11425001841	GASKET	1	
47	24162152112	NEEDLE BEARING	1	
48	24423355008	SEAL, OIL	1	
49	22423355008	SEAL, OIL	1	
50	26106080122	BOLT M 8 X 12 PLATED	1	
51	11465002200	MAIN BEARING US = 0.25	1	
52	11465002210	MAIN BEARING US = 0.50	1	
53	22312040080	PIN 4 X 8 STRAIGHT	2	
54	11498401940	PIPE	1	
55	23000019000	CLAMP 19	2	
58	16011001870	PLUG, RUBBER W/SCREW	1	
59	12125239450	SENDER, OIL PRESSURE	1	
60	11498508350	NIPPLE, DRAIN	1	
61	11435239400	JOINT, DRAIN	1	
62	22190160002	SEAL WASHER 16S	1	

YANMAR L100EE DEVMK2 — CYLINDER HEAD AND COVER ASSY.

CYLINDER HEAD AND BONNET ASSY.



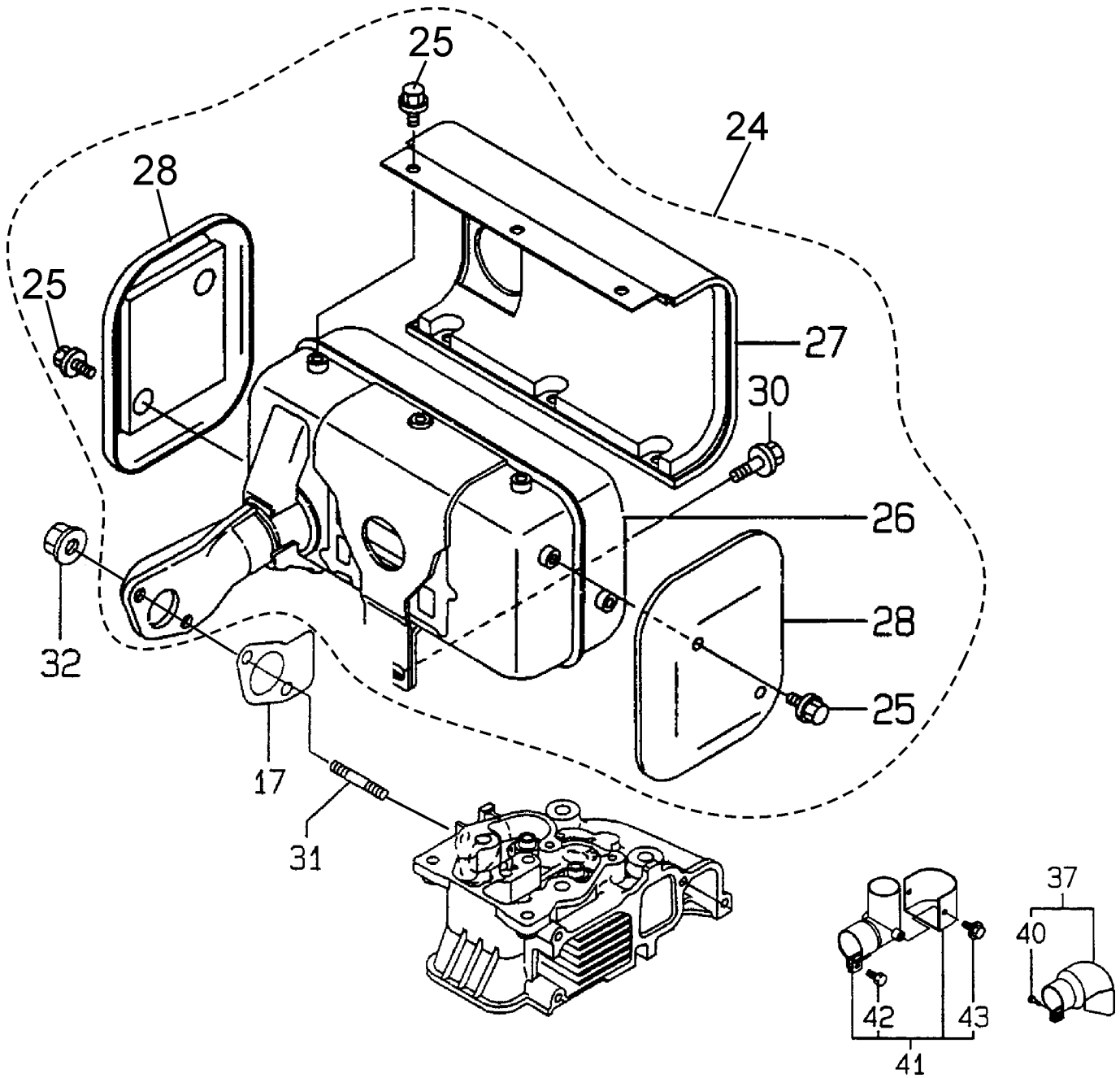
YANMAR L100EE DEVMK2— CYLINDER HEAD AND COVER ASSY.

CYLINDER HEAD AND COVER ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	11465111020	CYLINDER HEAD	1	
6	11465111100	VALVE, SUCTION	1	
7	11465111110	VALVE, EXHAUST	1	
8	11465011121	SPRING, VALVE	2	
9	11962011180	RETAINER, SPRING	2	
10	11465111250	SUPPORT CMP, ARM.....	1	INCLUDES ITEMS W/*
11*	11465111260	SUPPORT, ROCKER ARM	1	
12*	11465111650	ARM ASSY. INTAKE	1	
14*	11425011240	SCREW, VALVE ADJUST	1	
15*	26856060002	LOCK NUT 6	1	
16*	11465111660	ARM ASSY., EXHAUST	1	
18+	11425011240	SCREW, VALVE ADJUST	1	INCLUDES ITEMS W/+
19+	26856060002	LOCK NUT 6	1	
20*	22242000150	CIRCLIP 15	2	
21	11465011340	SEAL, VALVE STEM	2	
22	10421111370	CAP, VALVE	2	
23	11477111461	GASKET, NOZZLE	1	
24	11477111470	SPACER, NOZZLE	1	
25	11465011600	WASHER	2	
26	27310070000	COTTER 7	4	
27	26106060702	BOLT M 6 X 70 PLATED	3	
28	11425011901	RETAINER	1	
29	22351040008	SPRING PIN 4 X 8	1	
30	26106080552	BOLT M 8 X 55 PLATED	2	
31	26226060552	STUD M 6 X 55 PLATED	2	
32	26366060002	NUT M 6	2	
33	11465111310	GASKET, BONNET	1	
34	11465111950	COVER ASSY. HEAD.....	1	INCLUDES ITEMS W/#
36#	11425003591	SHAFT ASSY., DECOMP.	1	
39#	11425003640	SPRING	1	
41#	22312030160	PARALLEL PIN 3 X 16	1	

YANMAR L100EE-DEVK2— MUFFLER ASSY.

MUFFLER ASSY.



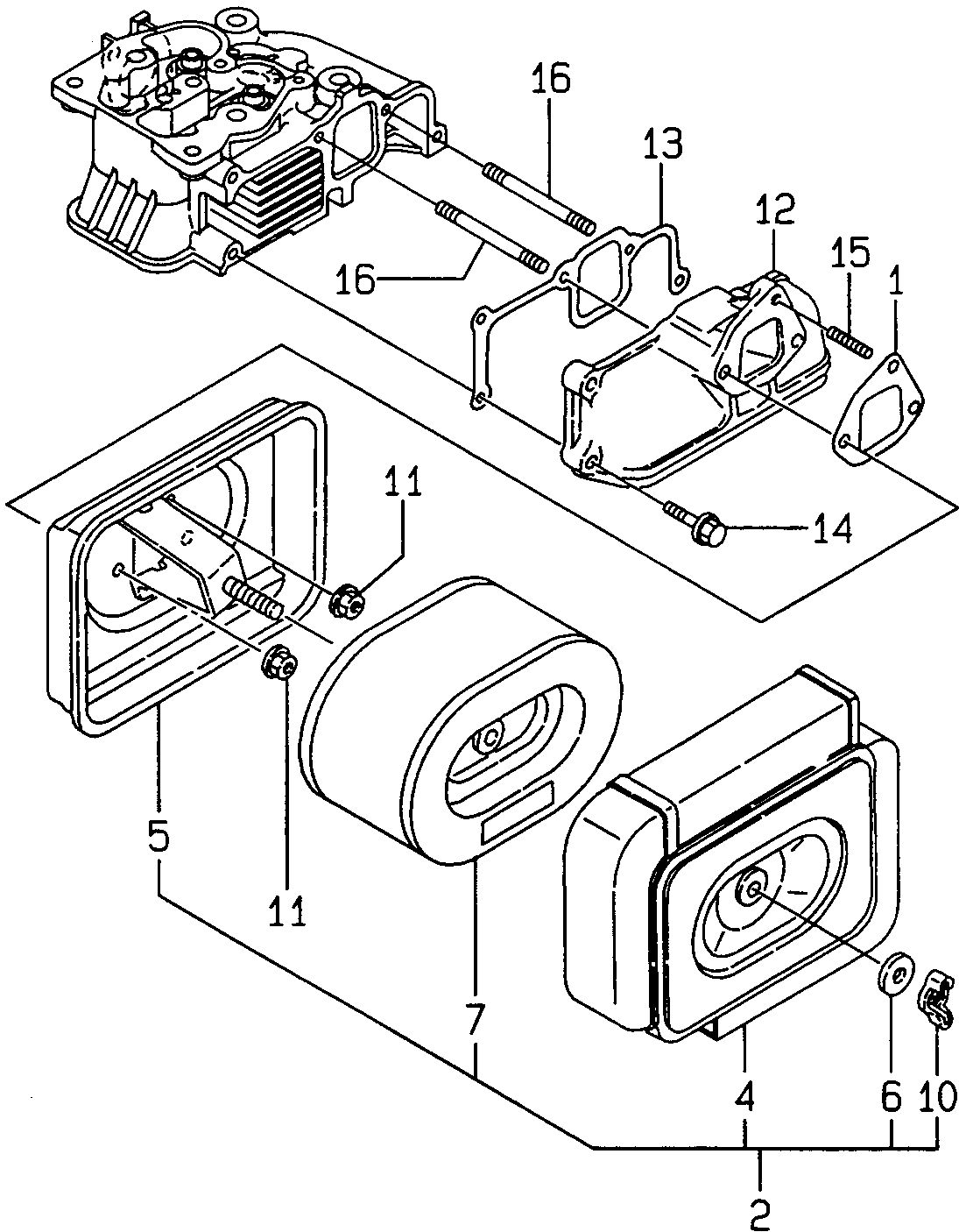
YANMAR L100EE-DEVMK2— MUFFLER ASSY.

MUFFLER ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
17	11465013201	GASKET, NON-ASB.	1	
24	11497013551	MUFFLER ASSY.	1	INCLUDES ITEMS W/*
25*	16026001580	BOLT M 6 X 6	10	
26*	11497013561	MUFFLER	1	
27*	11497013700	COVER A, MUFFLER	1	
28*	11497013710	COVER, MUFFLER	2	
30*	26106080182	BOLT, M 8 X 16 PLATED	2	
31	26216080182	STUD, M 8 X 18 PLATED	2	
32	26366080002	NUT, M 8	2	
37	10519813621	EXTENTION, SILENCER	1	INCLUDES ITEM W/#
40#	10509813990	BOLT	1	
41	11498513701	PIPE, SILENCER	1	INCLUDES ITEMS W/+
42+	10509813990	BOLT	1	
43+	26113060082	BOLT, M 6 X8	2	

YANMAR L100EE-DEVMK2— AIR CLEANER ASSY.

AIR CLEANER ASSY.



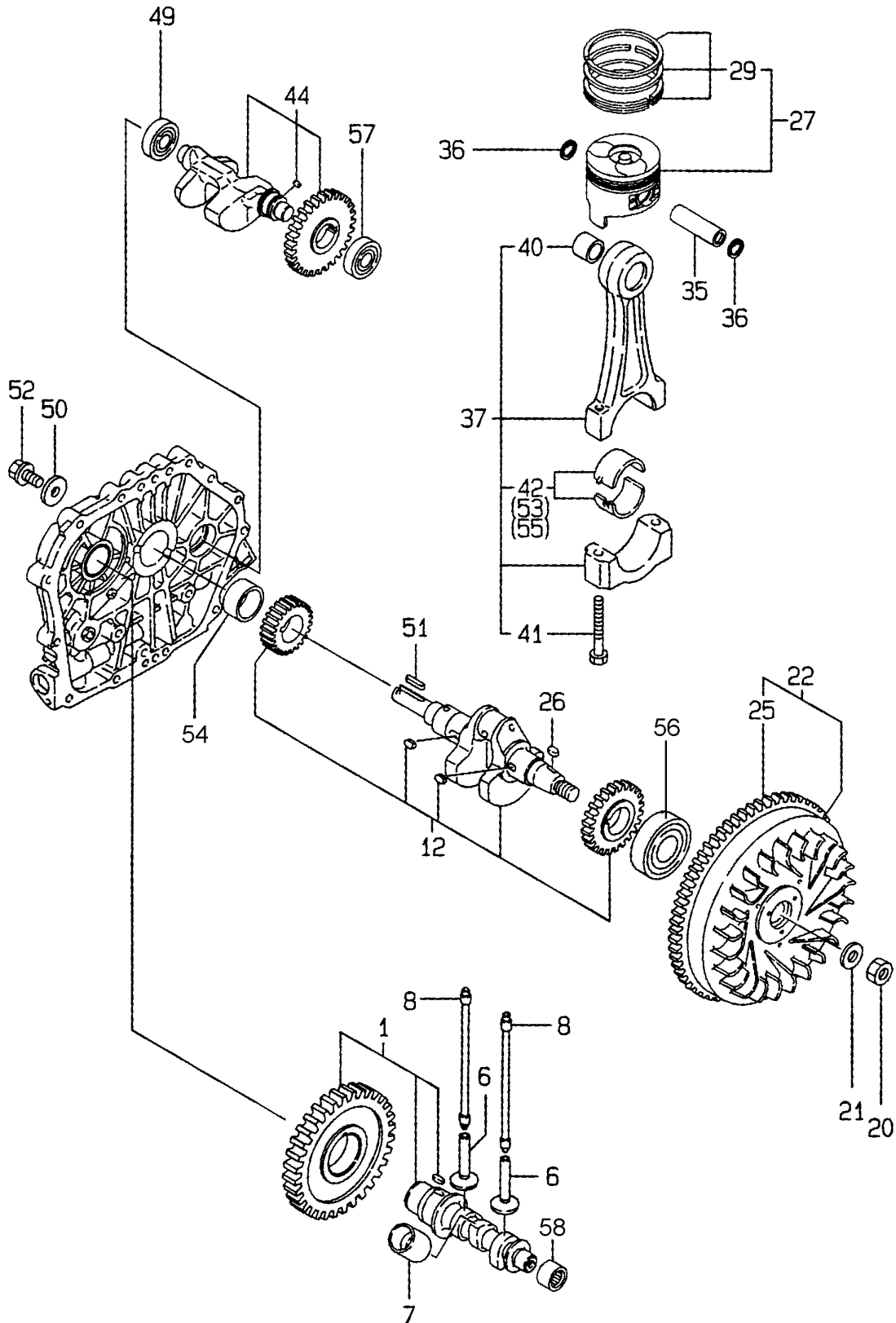
YANMAR L100EE-DEVK2— AIR CLEANER ASSY.

AIR CLEANER ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	11465012211	GASKET, AIR CLEANER	1	
2	71465012560	CLEANER ASSY. AIR	1	INCLUDES ITEMS W/*
4*	11465012520	COVER, AIR CLEANER	1	
5*	11465012530	CASE, AIR CLEANER	1	
6*	11425212560	WASHER M 8, SEAL	1	
7*	11465012590	ELEMENT W/PRE-FILTER	1	
10*	11425212550	WING, NUT M 8	1	
11	11425012300	U- NUT	3	
12	11469912020	PIPE, AIR INTAKE	1	
13	11465012301	GASKET, AIR INTAKE	1	
14	26106060252	BOLT M 6 X 25 PLATED	3	
15	26226060142	STUD M 6 X 14 PLATED	1	
16	26226060752	STUD M 6 X 75	2	

YANMAR — CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

CRANKSHAFT, PISTON AND CAMSHAFT ASSY.



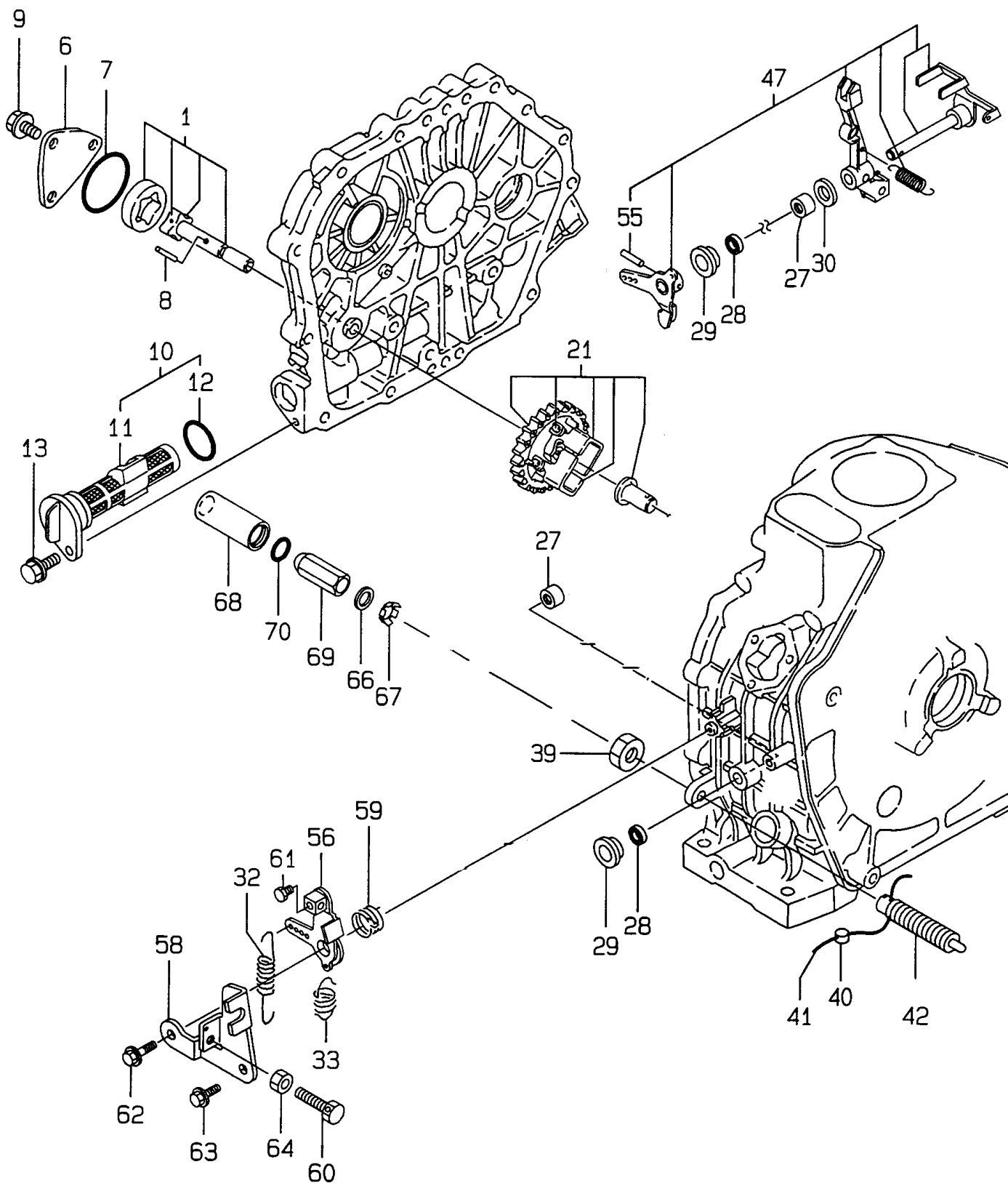
YANMAR — CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

CRANKSHAFT, PISTON AND CAMSHAFT ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	71466014100	CAMSHAFT ASSY., D	1	
6	11465014200	TAPPET	2	
7	11477114260	TAPPET, F.O.	1	
8	11465014401	ROD, PUSH	2	
12	71465421730	CRANKSHAFT ASSY.	1	
20	12271001220	NUT, M18	1	
21	11465021551	WASHER, FLYWHEEL	1	
22	11466221593	FLYWHEEL, DEJ., W/GEAR	1	INCLUDES ITEMS W/ #
25 #	11466221601	GEAR, RING	1	
26	22512050140	KEY, 5 X 14	1	
27	71465222720	PISTON, W/RINGS	1	INCLUDES ITEMS W/*
29*	71497022500	RING SET, PISTON	1	
35	11469922300	PIN, PISTON D=23	1	
36	12979222400	CIRCLIP 23	2	
37	71465023100	ROD ASSY., CONNECTING	1	INCLUDES ITEMS W/%
40%	12406023100	BUSH, PISTON PIN	1	
41%	10530023200	BOLT, ROD	2	
42%	71465023600	BEARING, CRANKPIN	1	
44	71497028100	SHAFT ASSY., BALANCER	1	
49	24101062034	BALL BEARING	1	
50	16031014550	WASHER	1	
51	22512070360	KEY 7 X 36	1	
52	26106080202	BOLT M 8 X 20 PLATED	1	
53	71465023610	BEARING, CRANKPIN U.S=0.25	1	
54	11465002100	BEARING, MAIN	1	
55	71465023620	BEARING, CRANKPIN U.S=0.50	1	
56	11465002150	BALL BEARING	1	
57	24101063034	BALL BEARING	1	
58	24162152112	NEEDLE BEARING	1	

YANMAR L100EE-DEVK2— LUB. OIL PUMP AND GOVERNOR ASSY.

LUB. OIL PUMP AND GOVERNOR ASSY.



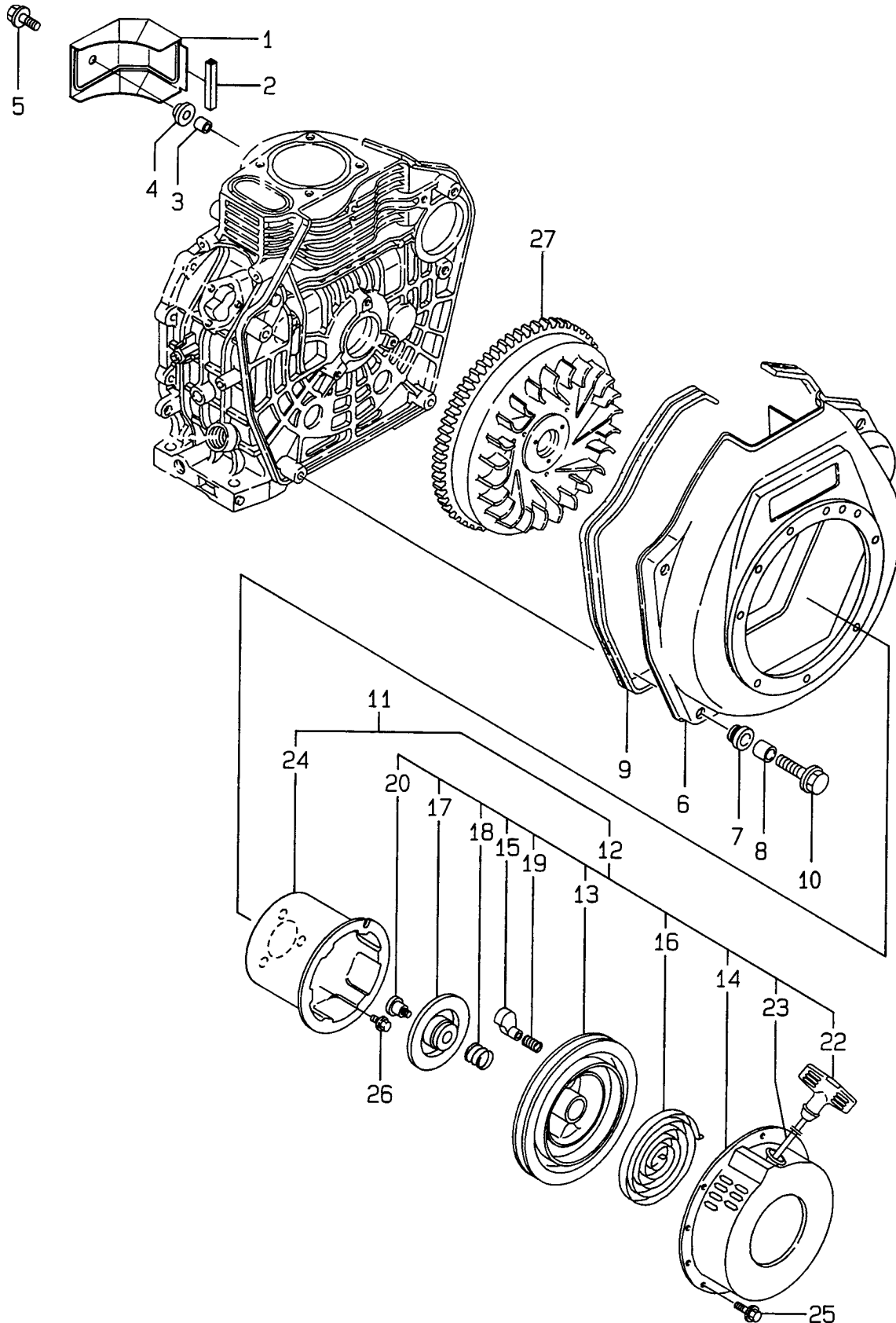
YANMAR L100EE-DEVMK2— LUB. OIL PUMP AND GOVERNOR ASSY.

LUB. OIL PUMP AND GOVERNOR ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	11465032010	PUMP ASSY. LUB. OIL	1	
6	11425032070	COVER, LUB. OIL PUMP	1	
7	10333832570	O-RING	1	
8	22312030160	PARALLEL PIN 3 X 16	1	
9	26476060142	BOLT, M 6 X14, TAPPING	3	
10	11425035110	STRAINER, LUB. OIL ASSY.	1	INCLUDES ITEMS W/*
11*	11425035070	STRAINER, LUB. OIL	1	
12*	24341000224	O-RING 1A S-22.4	1	
13	26106060162	BOLT M 6 X 16 PLATED	1	
21	71468561700	GOVERNOR ASSY.	1	
27	11477061520	BEARING, NEEDLE	2	
28	11477061600	SEAL, OIL	1	
29	11477061610	WASHER, THRUST	1	
30	22137080000	WASHER 8, POLISHED	1	
32	11497066010	SPRING, REGULATOR	1	
33	11425066200	SPRING, RETURN	1	
39	26776100002	LOCK NUT M10 PLATED	1	
40	13521061090	LEAD	1	
41	22451060000	WIRE 0.6	1	
42	11425066550	TORQUE SPRING ASSY.	1	
47	71468561500	LEVER ASSY., GOVERNOR	1	
10	11425035110	STRAINER, LUB. OIL ASSY.	1	INCLUDES ITEMS W/+
55+	22322030200	TAPER PIN 3 X 20	1	
56	11425266051	HANDLE, REGULATOR	1	
58	18336066110	BRACKET, REGULATOR	1	
59	11425266252	SPRING, RETURN	1	
60	11425066440	BOLT, ADJUSTING	1	
61	10522566990	SCREW	1	
62	26106060202	BOLT M 6 X 20 PLATED	1	
63	26476060142	BOLT M 6 X 14 TAPPING	1	
64	26757060002	NUT 6	1	
66	11477161800	WASHER	1	
67	11477161820	PLATE	1	
68	11477161900	PROCTECTOR	1	
69	11477161930	NUT	1	
70	24311000125	O-RING 1A P-12.5	1	

YANMAR L100EE-DEVMK2 — COOLING AND STARTING DEVICE ASSY.

COOLING AND STARTING DEVICE ASSY.



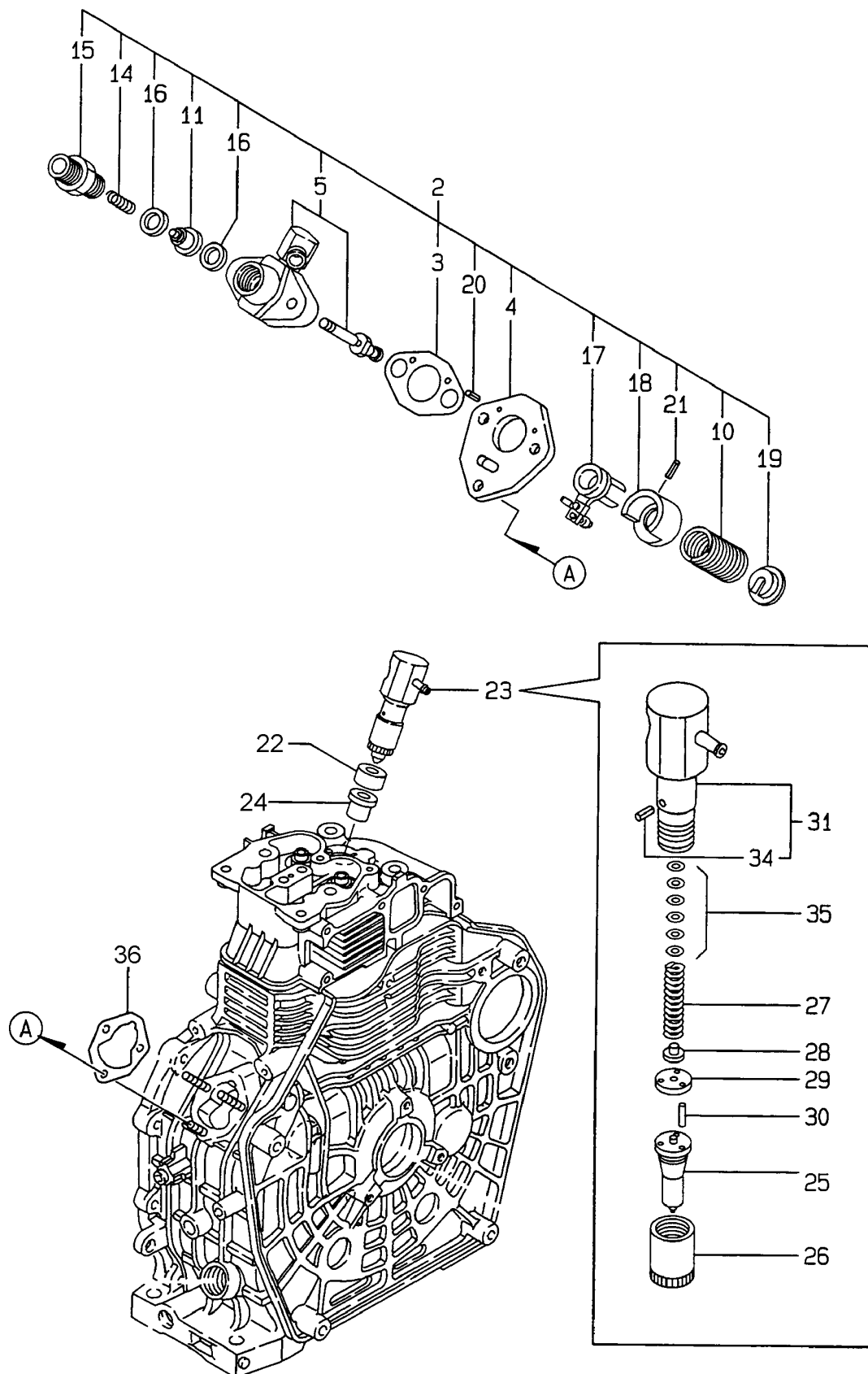
YANMAR L100EE-DEVK2 — COOLING AND STARTING DEVICE ASSY.

COOLING AND STARTING DEVICE ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	11465045201	COVER	1	
2	11435045320	RUBBER, SEAL	1	
3	11435045340	COLLAR	1	
4	18372055210	GROMMET	1	
5	26106060202	BOLT M 6 X 20 PLATED	1	
6	11466845102	CASE, FAN SILVER 17	1	
7	11425045301	RUBBER, CUSHION	4	
8	11425045310	COLLAR	4	
9	11465045330	SEAL, FAN CASE	1	
10	11437045351	BOLT, FAN CASE	4	
11	11466076052	RECOIL STARTER D ASSY.....	1	INCLUDES ITEMS W/*
12*	11466076251	RECOIL ASSY.	1	INCLUDES ITEMS W/\$
13*\$	11488076520	REEL, RECOIL	1	
14*\$	11466076531	CASE D, W/NO LABEL	1	
15*\$	11487076530	RATCHET	2	
16*\$	11487076540	SPRING, SPRIAL	1	
17*\$	11487076550	GUIDE, RATCHET	1	
18*\$	11487076560	SPRING, FRICTION	1	
19*\$	11487076570	SPRING, RETURN	2	
20*\$	11487076580	SET SCREW	1	
22*\$	11487076620	KNOB, STARTER	1	
23*\$	11465076631	ROPE, RECOIL STARTER	1	
24*	11466076592	PULLEY, STARTER	1	
25	26106060082	BOLT M 6 X 8 PLATED	4	
26	26106060122	BOLT M 6 X 12 PLATED	3	
27	11466221593	FLYWHEEL, DEJ. W/ GEAR	1	

YANMAR L100EE-DEVMK2— FUEL INJECTION PUMP ASSY.

FUEL INJECTION PUMP ASSY.



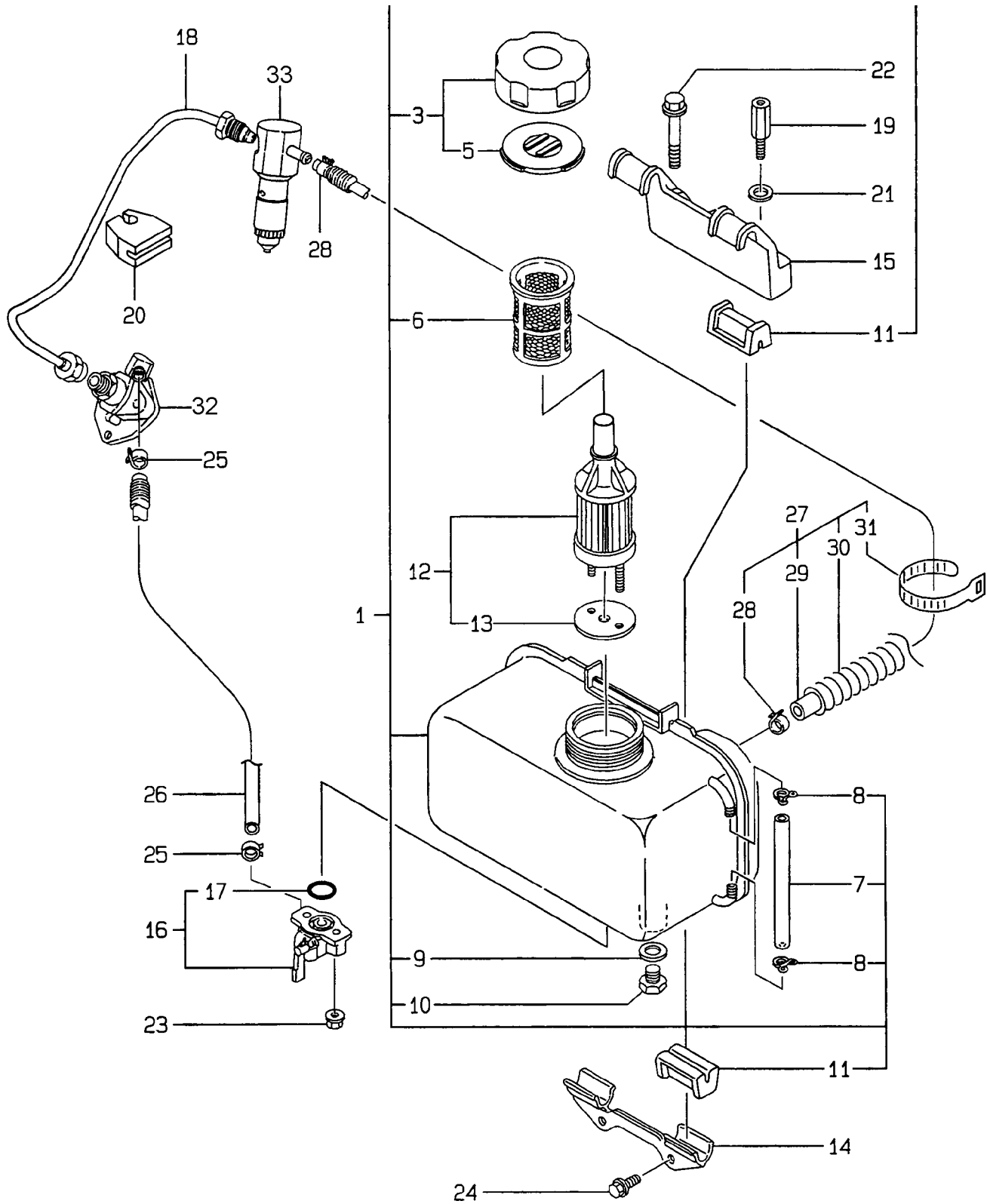
YANMAR L100EE-DEVMK2— FUEL INJECTION PUMP ASSY.

FUEL INJECTION PUMP ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	71465651110	PUMP ASSY., FUEL INJECTORS	1.....	INCLUDES ITEMS W/*
3*	10554651020	GASKET	1	
4*	11425051080	PLATE	1	
5*	11497051100	BODY, F.I. PUMP	1	
10*	11425051160	SPRING	1	
11*	11465051300	VALVE ASSY., DELIVERY	1	
14*	10554651330	SPRING, DELIVERY VALVE	1	
15*	11425051340	HOLDER, F. I. P. DELIVERY	1	
16*	12455051350	GASKET, DELIVERY	2	
17*	11425051600	LEVER ASSY., CONTROL	1	
18*	11425051640	SEAT A, SPRING	1	
19*	11425051650	SEAT B, SPRING	1	
20*	22351020006	SPRING PIN 2 X 6	2	
21*	22351030008	SPRING PIN 3 X 8	2	
22	11477111470	SPACER, NOZZLE	1	
23	71487553101	VALVE ASSY., F. INJECT	1.....	INCLUDES ITEMS W/+
24	11477111461	GASKET, NOZZLE	1	
25+	11487153000	NOZZLE, ASSY.	1	
26+	11959353080	NUT, NOZZLE CASE	1	
27+	11425053120	SPRING, NOZZLE	1	
28+	11959353130	RETAINER	1	
29+	11477553140	SPACER, VALVE STOP	1	
30+	11477553210	PIN	2	
31+	11487553100	HOLDER ASSY.	1.....	INCLUDES ITEMS W/%
34+%	11425053331	PIN, SPRING	1	
35+	11425053400	SHIM PACK	1	
36	11425001800	SHIM SET	1	

YANMAR L100EE-DEVMK2 — FUEL TANK AND FUEL PIPE ASSY.

FUEL TANK AND FUEL PIPE ASSY.



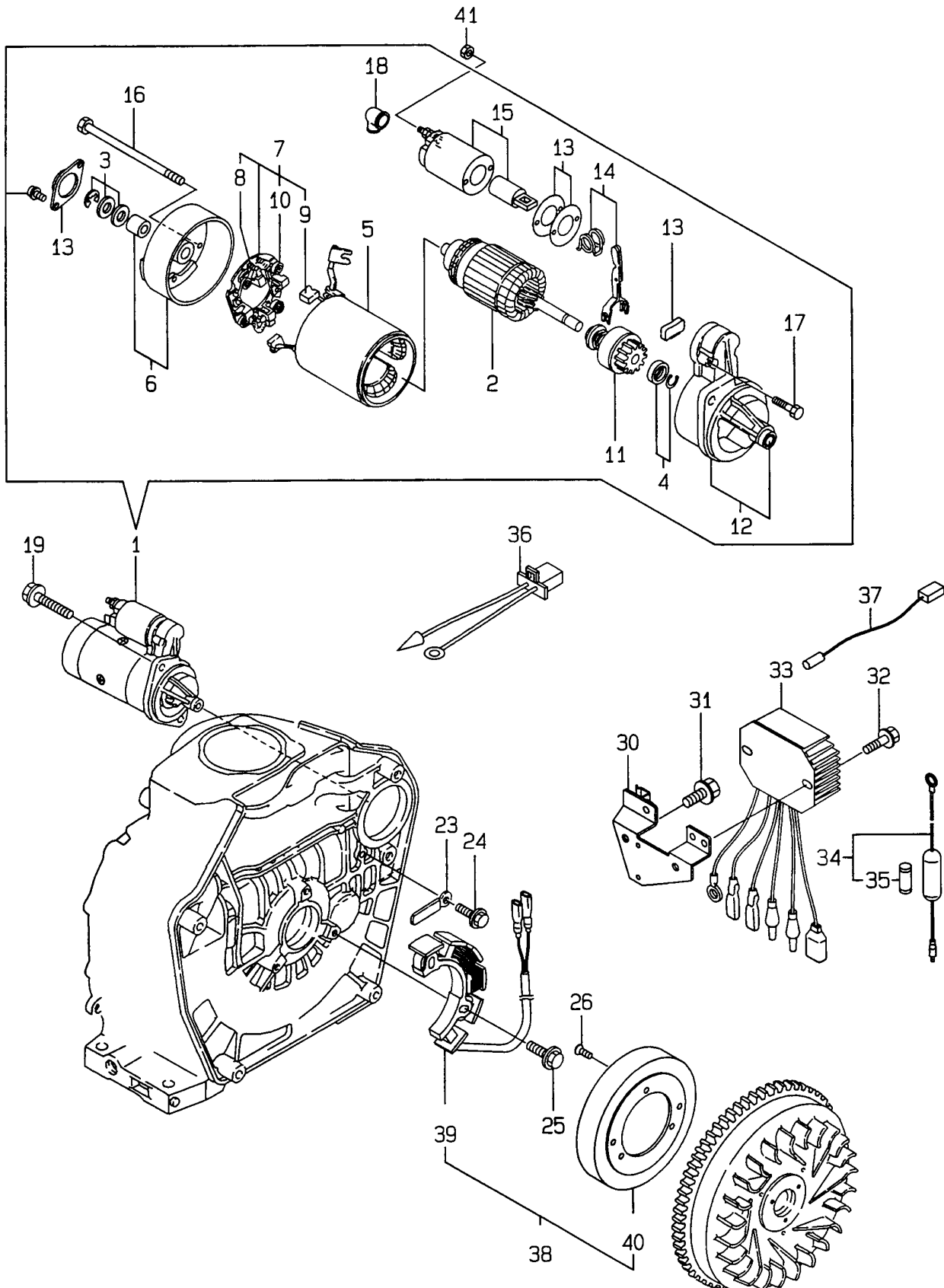
YANMAR L100EE-DEVMK2 — FUEL TANK AND FUEL PIPE ASSY.

FUEL TANK AND FUEL PIPE ASSY.

NO	PART NO	PART NAME	QTY.	REMARKS
1	71465055130	TANK ASSY., FUEL	1	INCLUDES ITEMS W/*
3*	11428855041	CAP ASSY., FUEL TANK	1	INCLUDES ITEMS W/+
5*+	11428855081	VALVE	1	
6*	11425055100	FILTER, FUEL	1	
7	11465055150	PIPE, GAUGE	1	
8	10385455220	CLAMP	2	
9*	23414080000	GASKET 8, ROUND	1	
10*	10530055080	PLUG, DRAIN	1	
11	11425055201	DAMPER, FUEL TANK	4	
12*	11425055121	FILTER, FUEL OIL	1	INCLUDES ITEMS W/#
13#	11425055130	GASKET	1	
14	11429955210	STAY	1	
15	11469955230	STAY B, FUEL TANK	1	
16	11425055300	COCK ASSY., FUEL	1	INCLUDES ITEMS W/%
17%	24341000150	O-RING 1A S-15.0	1	
18	11465159802	PIPE, FUEL INJECTION	1	
19	11456055810	BOLT, LIFTING	1	
20	11465059850	BRACKET, PIPE	1	
21	22117080000	WASHER 8	1	
22	26106080452	BOLT M 8 X 45 PLATED	1	
23	26366060002	NUT M 6	2	
24	26476060142	BOLT M 6 X 14 TAPPING	2	
25	10699044660	CLIP, HOSE	2	
26	11426859061	PIPE, FUEL OIL	1	
27	11465259300	PIPE, FUEL RETURN	1	INCLUDES ITEMS W/■
28■	12472259050	CLAMP 9	2	
29■	11465059060	PIPE, FUEL RETURN	1	
30■	11465259310	TUBE, PROTECT	1	
31■	12175059890	CLAMP 140	1	
32	71465651110	PUMP ASSY., FUEL INJECTION	1	
33	71465653101	VALVE ASSY., FUEL INJECTION	1	

YANMAR L100EE-DEVMK2 — STARTING MOTOR AND DYNAMO ASSY.

STARTING MOTOR AND DYNAMO ASSY.



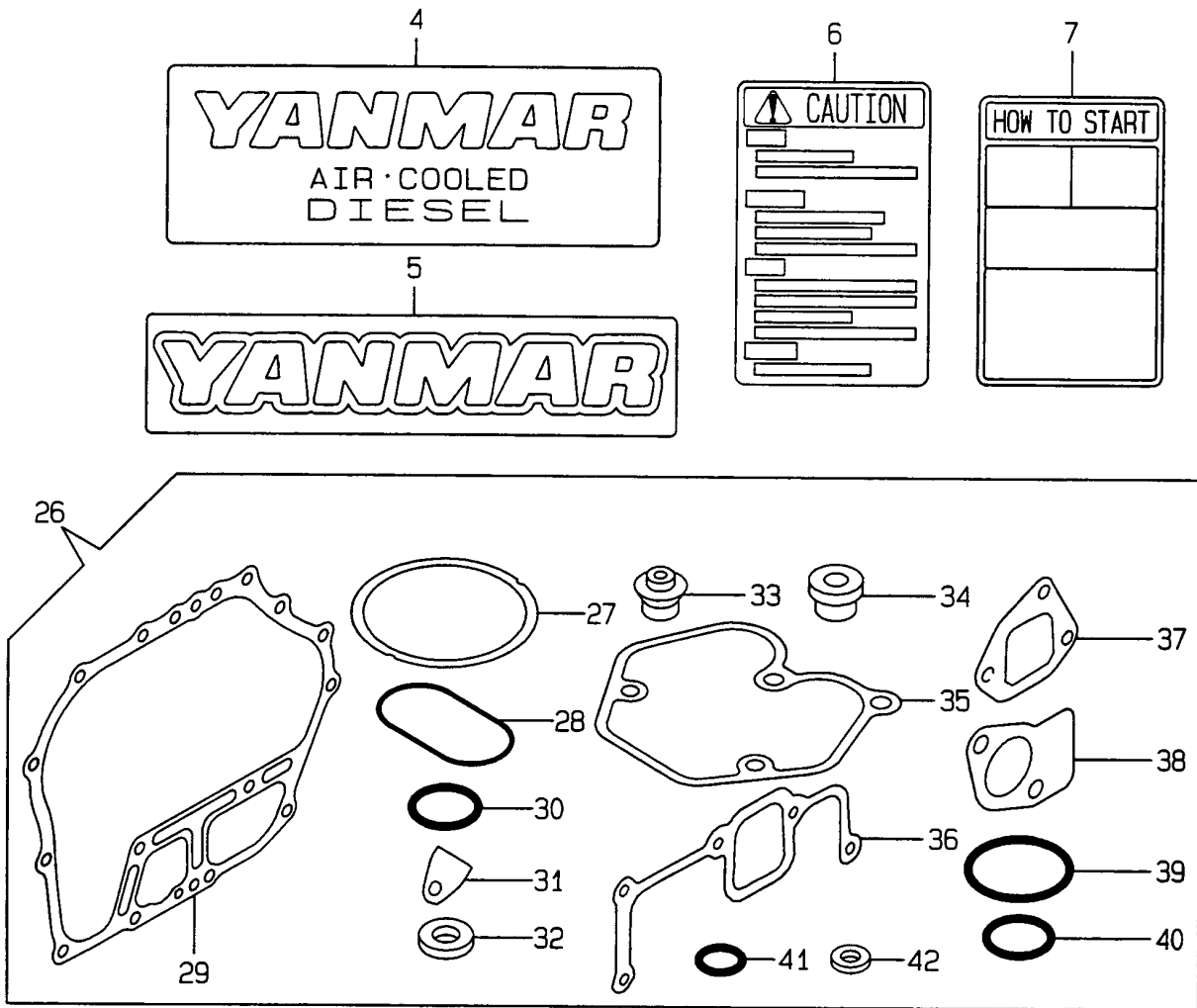
YANMAR L100EE-DEVMK2 — STARTING MOTOR AND DYNAMO ASSY.

STARTING MOTOR AND DYNAMO ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	11436277011	STARTER, S114-651A	1	INCLUDES ITEMS W/*
2*	11438177110	ARMATURE	1	
3*	X2114811000	WASHER KIT, THRUST	1	
4*	X2114715500	STOPPER SET, PINION	1	
5*	11438177130	COIL ASSY., FIELD	1	
6*	11438177140	COVER, REAR	1	
7*	11437177160	HOLDER ASSY., BRUSH	1	INCLUDES ITEMS W/ +
8* +	11437179040	BRUSH, -	1	
9* +	11437179050	BRUSH, +	1	
10* +	11437179060	SPRING, BRUSH	4	
11*	X211485016	PINION ASSY.	1	
12*	11438177151	HOUSING ASSY. GEAR	1	
13*	11437177170	COVER KIT, DUST	1	
14*	11437177180	SHIFT LEVER KIT	1	
15*	12429877020	SWITCH, MAGNET	1	
16*	12419577770	BOLT, THROUGH	2	
17*	11437179070	BOLT M 6 X 37	2	
18	X2114274200	COVER, TERMINAL	1	
19	26106100302	BOLT M 10 X 30 PLATED	2	
23	16071078710	CLAMP, CORD	1	
24	26106060122	BOLT M 6 X 12 PLATED	1	
25	26106060202	BOLT M 6 X 20 PLATED	3	
26	26577060142	SCREW M 6 X 14	3	
30	11438577400	BRACKET	1	
31	26106060122	BOLT M 6 X 12 PLATED	2	
32	26106060202	BOLT M 6 X 20 PLATED	2	
33	11435177210	REGULATOR	1	
34	11435177640	FUSE ASSY.	1	INCLUDES ITEMS W/%
35%	29411200000	FUSE 20A, CARTRIDGE	1	
36	10519878570	HARNESS C, WIRE	1	
37	11498578560	HARNESS, WIRE	1	
38	11435178261	DYNAMO ASSY.	1	INCLUDES ITEMS W/ #
39 #	11435178771	STATOR ASSY., 132.1MM	1	
40 #	11435178781	WHEEL, STATOR, 132.1MM	1	
41	26716080002	NUT M 8	1	

YANMAR L100EE-DEVMK2 — TOOL LABEL AND GASKET SET ASSY.

TOOL LABEL AND GASKET SET ASSY.



YANMAR L100EE-DEVMK2 — TOOL LABEL AND GASKET SET ASSY.

TOOL LABEL AND GASKET SET ASSY.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
4	11425007090	LABEL, AIR COOLED	1	
5	11425007111	LABEL, YANMAR	1	
6	11426807240	LABEL, CAUTION	1	
7	11426107350	LABEL	1	
26	71465192620	GASKET SET	1	INCLUDES ITEMS W/*
27*	11465101330	GASKET, CYLINDER HEAD CMP.	1	
28*	11465001380	O-RING	1	
29*	11465001412	GASKET, CRANKCASE	1	
30*	11429901950	O-RING	1	
31*	11425001841	GASKET	1	
32*	22190160002	SEAL WASHER 16S	4	
33*	11465011340	SEAL, VALVE STEM	2	
34*	11477111461	GASKET, NOZZLE	1	
35*	11465111310	GASKET, BONNET	1	
36*	11465012301	GASKET, AIR INTAKE	1	
37*	11465012211	GASKET, AIR CLEANER	1	
38*	11465013201	GASKET, NON-ASB	2	
39*	10333832570	O-RING	1	
40*	24341000224	O-RING 1A S-22.4	1	
41*	24311000125	O-RING 1A P-12.5	1	
42*	23414080000	GASKET 8, ROUND	1	

PAYMENT TERMS

Terms of payment for parts are net 10 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Anyline item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price.

Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable here under for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

OPERATION AND PARTS MANUAL

HERE'S HOW TO GET HELP

*PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING*

PARTS DEPARTMENT

800-427-1244 or 310-537-3700

FAX: 800-672-7877 or 310-637-3284

SERVICE DEPARTMENT

800-421-1244

FAX: 310- 537-4259

TECHNICAL ASSISTANCE

800-478-1244

FAX: 310- 631-5032

WARRANTY DEPARTMENT

888-661-4279, or 310-661-4279

FAX: 310- 537-1173



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POST OFFICE BOX 6254
CARSON, CA 90749
310-537-3700 • 800-421-1244
FAX: 310-537-3927
E-MAIL: mq@multiquip.com
WWW: multiquip.com

Atlanta • Boise • Dallas • Houston • Newark
Quebec, Canada • Manchester, UK • Rio De Janiero, BR • Guadalajara, MX



manufactured for Multiquip Inc.
by
MIKASA SANGYO CO., LTD. Tokyo, Japan